The American Artisan
And Hardware Record

Vol. 56. No. 18. CHICAGO, OCTOBER 31, 1908. $2.00 Per Year.

All Kinds of
BOLTS, RIVETS, NUTS, WASHERS, CARRIAGE FORGINGS, ETC.
Send for 1908 Catalog "R." Prices on Application
COLUMBUS BOLT WORKS, Columbus, O.

GET THE LIVE LINE
"AMERICAN SEAL"
Elastic Oil Roofing Cement, Stove Putty and Asbestos Furnace Cement
For Furnaces, Stoves, Ranges and Roofs.
Jobbers write to-day for prices
THE
Wm. Connors Paint Mfg. Co.
Makers. TROY, N. Y.
Western Agents: Friedley-Voshardt Co., 194 Mather St., Chicago, Ill.
Southwestern Agents: Stockhoff Supply Co., 107 N. Main St., St. Louis, Mo.

Trying to do business without advertising is like winking at a girl in the dark: you know what you are doing but nobody else does.

MATCHLESS
Spring and Pivot Hinges
Floor Hinges, Jamb Hinges and Hardware Specialties.
The fact that Matchless Spring Hinges have been on the market since 1895 and that in that time not one set has required repairs from fault of hinge speaks very well for their serviceability and wearing qualities.
If your Jobber cannot furnish them write us.
LAWSON MFG. CO.
40 Dearborn St., Chicago, Ill.

NEW DESIGN WORLD'S BEST
TUBULAR TRACK DOOR HANGER

We have increased the diameter of the wheel to 2¼ in., making it the easiest running Hanger on the market.
The supplementary wheel prevents derailment. Frame is made of the best grade malleable iron. Finished in Aluminum and each pair packed in an individual box, complete with bolts. The track brackets are slidable and may be placed at any point desired. We do not sell catalog houses. Write for prices.
SAFETY DOOR HANGER CO.
Manufacturers
Ashland, Ohio Hamilton, Ont., Can.

"NEVER-BREAK"
TRADE MARK

Catalog Free
"NEVER-BREAK"
STEEL SPIDERS, GRIDDLES AND KETTLES
WILL NOT Scale Off like cheap enamel.
WILL NOT Scorch or Burn like light fry pans and skillets.
WILL NOT Absorb Grease or Flavors like cast Iron.
THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers
"NEVER-BREAK" Goods.

The Highest Grade File Made.
DELTA
TRADE MARK
DELTA
DELTA FILE WORKS
CARVER FILE CO.
PHILADELPHIA, PA.
An independent organization not connected with the trust in any form, shape or manner.
FILES OF QUALITY
FILES
The File You Will Eventually Use.

PULLMAN
SASH BALANCES

Are you selling them?
IN USE EVERYWHERE
Send us your orders
PULLMAN MFG. COMPANY
SOPHIA STREET
ROCHESTER, N. Y., U. S. A

100
Tinners' Patterns
Complete for
$1.00
Sent Postpaid on Receipt of Price
Daniel Stern
355 Dearborn Street - Chicago

ALL CAST IRON

Costs 1-4 of a cent an hour for gas to run it.

3 Sizes—34-in., 36½-in. and 38½-in. to urn.

A Dorcas Good Luck Gas Heater

¶Will heat the average dwelling house at the cost of ¼ of a cent an hour in cold weather.

¶A prominent railroad company has adopted this stove as their standard after exhaustive competitive tests conducted by their heat and light department.

¶This railroad company reports to us that the most they can make these stoves burn is 15 feet for the No. 5, 17 feet for No. 6, 19 feet for the No. 7 (gas per hour).

¶They further report that during the coldest weather last winter—that they heated passenger stations which are 60x20x14 feet with one No. 6 Dorcas, keeping the temperature to 70 degrees and never burning over 15 feet of gas per hour and keeping the average much below that.

¶You can sell the stoves at $14.00, $15.50 and $17.00 and make 50 per cent. on your money.

Are you doing as well? We can fill orders.

STOVE & RANGE CO. OF PITTSBURGH,

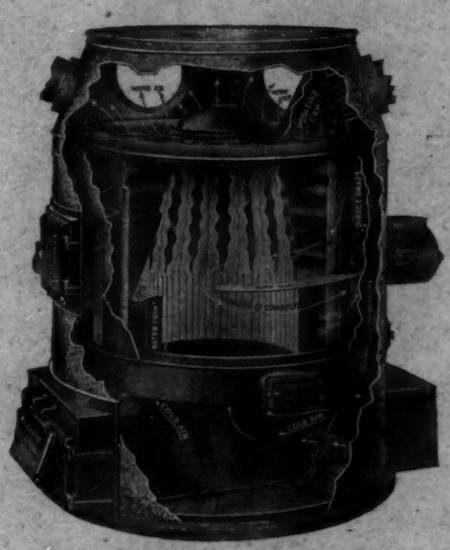
PITTSBURGH, PA.

Makers of

GOOD VALUES IN STOVES

The 8th in a Series of Reasons Why the KELSEY is the Best Warm Air System

The KELSEY System —in small Cottages



In small cottages the heating problems may not be so complex as in large public buildings,—but pure warm air, and plenty of ventilation is just as necessary in a small home as in any other building.

An ordinary "hot air" furnace usually *heats* the small cottage,—but ventilation is as deficient as with steam or hot water.

With the KELSEY Warm Air Generator, the small cottage is not only satisfactorily and comfortably warmed, even in the coldest zero weather,—but the warm air supplied is always pure and healthful, and a positive system of ventilation keeps the rooms always free from close, stuffy air.

And with the KELSEY, every room in the cottage will be uniformly warmed,—no cold corners, no cold bed-rooms,—regardless of distance from the Generator itself, or exposure.

There's a splendid opportunity for you in the sale of the KELSEY in your vicinity,—if the exclusive agency is not already placed.

Shall we tell you about our plan?

KELSEY HEATING COMPANY

SYRACUSE, N. Y.

NEW YORK: 156 Fifth Ave. **PHILADELPHIA: 24 So. 7th St.**

CHICAGO: Van Evera & Lewis Mfg. Co., 104-106 W. Lake St.

James Smart Mfg. Co., BROCKVILLE, Ont., Sole Makers for Canada

"IT'S ON LEGS"

LORAIN STEEL RANGE

Built up from the Floor

We want a live dealer in every town to sell the Lorain. Catalogue and discount upon application

MANUFACTURED BY

NATIONAL STOVE CO. DIVISION AMERICAN STOVE CO. **LORAIN, OHIO**

WESTERN BRANCH, 4th and Elm Streets, St. Louis, Mo. PHILADELPHIA BRANCH, 31 North 2nd Street

LORAIN RANGES ARE ALSO SOLD BY

MARSHALL WELLS CO., Duluth, Minn., Winnipeg and Portland, Oregon.
PACIFIC STOVE CO., Los Angeles, Cal. GLOBE MANUFACTURING CO., Oakland, Cal.
HARPER & McINTIRE, Ottumwa, Iowa.

A GOOD THING for the RIGHT DEALER

Better Than Most

FOSTER'S OPAL

As Good as the Best

Made in Nos. 8-16, 8-18, 8 and 9-20. All sizes have Duplex Grate.

If desired all sizes can be furnished with STEEL HIGH CLOSET, RESERVOIR, WATER FRONT, OVEN THERMOMETER AND TOWEL ROD.

One good, energetic dealer is desired in every town to handle this range. Inquiries are earnestly solicited from all such. Write to-day.

THE FOSTER STOVE COMPANY, IRONTON, OHIO

BORN'S NEW MALLEABLE

LOOKS all right, don't it? Well, it is all right—High class materials throughout, smooth, well fitted malleable castings, handsome finish. A range which will compare favorably with any other on the market, yet—**listen.**

It can be profitably retailed at from $45.00 to $48.00 for No. 8818, with closet and reservoir as shown!

Why continue laboring under the handicap of enormous cost prices and making an occasional sale with but a few dollars profit? Born's new malleable meets every requirement, will sell readily, and will fully repay your efforts with generous profits.

Three sizes with and without reservoir. Write for circular and discounts.

The Born Steel Range Co.

CLEVELAND, OHIO

WHY NOT

TAKE ADVANTAGE

OF

A BARGAIN

SEND US THE INQUIRY
THE ORDER WILL
FOLLOW

WHITE'S POPLAR

WHITE'S NECTAR

THOMAS WHITE STOVE COMPANY

QUINCY, ILLINOIS

Red Cross Ranges, Stoves and Heaters

We were for many years Northwestern Agents for Co-Operative Foundry Co. and are anxious to close out this line of genuine Red Cross Stoves, Ranges and Heaters. Order at once while assortment is complete as these desirable first class stoves will soon be sold at these unheard of prices:

Size.	Name.	Regular Price.	Our Price.
9-18	Victor Res	$40.29	$32.25
8-20	Victor Res	43.29	34.75
9-20	Victor Res	43.29	34.75
9-16	Princess Sq	25.53	21.75
9-16	Princess Res	31.53	26.80
9-18	Princess Res	34.53	29.30
9-20	Princess Res	37.53	32.00
9-18	Tribune Sq	24.50	20.75
9-20	Tribune Sq	27.50	23.35
9-18	Duchess Sq	28.53	23.00
8-18	Imperial Sq	35.23	30.00
8-20	Imperial Sq	38.68	33.00
9-20	Monarch Sq	29.25	25.00
8-18	Monarch Res	31.50	25.25
8-18	Monroe Sq	26.00	22.00
9-20	Monroe Sq	27.73	22.25
8-18	Monroe Res	30.00	24.00
9-20	Model Sq	27.70	22.25
8-18	Model Res	30.00	24.00
8-20	Model Res	32.93	26.50
8-18	Herald Res	28.10	24.00
8-18	Regal Sq	23.15	19.75
9-18	Regal Sq	23.15	19.75
8-20	Regal Sq	25.90	22.00
9-20	Regal Sq	25.90	22.00
8-18	Regal Res	28.15	24.00
48-21	Talisman Sq	20.75	16.75
49-21	Talisman Sq	20.75	17.75
48-23	Talisman Sq	23.50	18.75
49-23	Talisman Sq	23.50	20.00
68-23	Talisman Sq	25.60	20.50
48-21	Talisman Res	25.75	20.60
49-21	Talisman Res	25.75	22.00
48-23	Talisman Res	28.50	23.00
49-23	Talisman Res	$28.50	$24.25
68-23	Talisman Res	30.60	24.50
69-25	Talisman Res	33.35	28.35
9-21	Challenge Sq	23.25	19.00
9-18	Rival Sq	20.23	17.25
8-20	Rival Sq	23.65	19.00
9-20	Rival Sq	23.65	20.00
9-20	Rival Res	29.28	25.00
8-18	Ideal Sq	21.50	18.25
9-18	Ideal Sq	21.50	18.25
8-20	Ideal Sq	24.25	20.75
9-20	Ideal Sq	24.25	20.75
9-22	Ideal Sq	27.00	23.00
8-18	Ideal Res	26.50	22.50
9-18	Ideal Res	26.50	22.50
8-20	Ideal Res	29.25	25.00
9-20	Ideal Res	29.25	25.00
9-22	Ideal Res	32.00	27.25
8-21	Champion Sq	20.00	17.00
9-21	Champion Sq	20.00	17.00
8-23	Champion Sq	22.75	18.25
9-23	Champion Sq	22.75	19.25
8-19	Champion Res	22.25	18.00
8-21	Champion Res	25.00	21.25
9-21	Champion Res	25.00	21.25
8-23	Champion Res	27.75	22.25
8-20	Laurel Sq	22.68	18.25
9-20	Laurel Sq	22.68	18.25
8-18	Laurel Res	25.30	20.25
8-20	Laurel Res	28.50	23.00
9-20	Laurel Res	28.50	23.00
8-20	Mascot Sq	16.25	13.85
9-20	Mascot Sq	16.25	13.85
9-22	Mascot Sq	19.00	16.25
8-18	Mascot Res	$18.50	$15.75
9-20	Mascot Res	21.25	18.00
9-22	Mascot Res	24.00	20.50
x28	Banner Sq	19.00	15.25
x9	Banner Res	25.00	20.00
320	Oak for Wood	23.38	20.00
314	Oak for Coal	17.05	14.50
34	Oak for Coal	19.80	17.00
36	Oak for Coal	22.00	18.75
24	Oak for Coal	18.15	15.50
120	Oak for Wood	21.38	18.25
116	Oak for Coal	17.05	14.50
114	Oak for Coal	14.73	12.50
181	Oakleaf	18.00	15.50
141	Oakleaf	14.50	12.35
121	Oakleaf	12.75	10.85
116	Gem Laundry	7.88	6.30
15	Jewell 1½ sheet	16.75	14.25
17	Jewell 1½ sheet	18.25	15.50
24	Triumph	18.25	15.50
26	Triumph G. & P.	21.88	18.50
41	Sylvan	10.63	9.00
43	Sylvan	12.75	10.85
45	Sylvan	15.13	12.85
141	Sylvan	12.75	10.85
133	Sylvan	15.13	12.85
145	Sylvan	17.00	14.50
243	Sylvan	18.75	16.00
123	Cottage	18.00	14.50
125	Cottage	19.00	15.25
21	Ontario	6.38	5.50
23	Ontario	7.88	6.75
25	Ontario	9.13	7.75
18	Warwick	5.50	4.75

Write Us Today for Particulars

J. P. LINDEMANN & SONS, - 5000 STATE ST., MILWAUKEE, WIS.

Are You Selling a Steel Range

that will heat the water in the Reservoir and bake **all at the same time.**

The **first** fire in the **Crown-Princess** does heat the water very **hot** in the **eleven** gallon copper reservoir without detracting one single degree of heat from the oven.

This is a new improvement that utilizes the **waste** heat.

A drain tube in the bottom makes it easy to clean out—don't have to lift a heavy reservoir (all covered with soot) out of the casing. Saves time, trouble and fuel.

A convenience your trade would appreciate. A postal will bring you full information. Send it today. We help you turn prospects into purchasers.

ALLEN MANUFACTURING COMPANY

STEEL RANGE SPECIALISTS

NASHVILLE, TENN.

Distributors
Jno. T. Allen & Co., Los Angeles, Cal.

Distributors
Wormnest Stove & Range Co., Grand Rapids, Mich.

IT IS OUR AIM

QUALITY STOVES RANGES SURE TO PLEASE

to manufacture stoves and ranges of unquestioned merit and individuality.

IT SHOULD BE YOUR AIM

to always supply your customers with goods bearing just these qualities.

Quality Stoves and Ranges

lead in exclusive features, finish and beauty of design, and are guaranteed to be free from any defects and as perfect as it is possible to make them. The prices are no higher than for goods of less merit.

Write for our Catalog

Quality Stove & Range Co., Belleville, Ill.

PLACE YOUR ORDERS

With the Old Reliable

OHIO STOVE CO.

STOVES AND RANGES

SATISFACTORY SERVICE ASSURED UNDER ENTIRE NEW MANAGEMENT

PORTSMOUTH, O.

Munsell's Mica

THE STANDARD FOR HIGH GRADE STOVES

EUGENE MUNSELL & CO., "The Mica Headquarters"

NEW YORK: 68 Church Street **CHICAGO: 358 Dearborn Street**

"American Beauty"

Gas Heaters, Ranges and Hot Plates

QUALITY—the highest.
EFFICIENCY—the greatest.
LIFE—the longest.

PRICES—moderate.
SHIPMENTS—immediate.

Get a reliable line, with "talking points that wear." Having largely increased our facilities, we need a few more outlets.

AMERICAN BEAUTY STOVE CO.,
ERIE, PA.

CUT THIS OUT

To the Publishers
The American Artisan and Hardware Record
355 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

Name .....
Address .....
Town ..... State .....

Every Progressive Dealer
Should have our Catalog, it describes many exceptional opportunities.

Made in Four Sizes.

The PEARL ROSEMONT

A First-Class Base Burner at a

MEDIUM PRICE

A Sure Seller every day in the week and a money maker for the dealer

Its construction and ornamentation are the result of the most practical ideas of up-to-date stove building.

It is a perfect worker in every way, either as a **single or double** heater.

The Fire pots are heavy and sizes given in catalog are the measurements inside.

THE GRATE IS THE RANSOM DUPLEX pattern in which **we operate** the shaking ring by a **ROD,** thus avoiding all possibility of dust or ashes coming out when operating the shaking ring. It is our Special Feature.

THE FLOYD-WELLS CO.
ROYERSFORD, PA.
83 Kinzie St., CHICAGO, ILL.

SAVE HALF YOUR FUEL
BY USING THE
ROCHESTER RADIATOR

Satisfaction guaranteed, or money refunded Over 100,000 of them in use. Fits any stove or furnace.

We make the original and genuine Rochester Radiator.
We do not sell to Catalog Houses.

Price, from **$2.00** to **$12.00**
FOR HARD OR SOFT COAL, WOOD OR GAS.
We refer all inquiries to you from your town when you carry a stock of our Radiators.
We guarantee our Radiators not to interfere with or choke the draught.
They are easily cleaned.
Write for descriptive Catalog and Prices.

ROCHESTER RADIATOR CO., 125 Furnace St. ROCHESTER, N. Y.

Boston, Mass., S. M. Howes Co.; Detroit, Mich., Standart Bros., Ltd.; St. Paul, Minn., Farwell, Ozmun, Kirk & Co.; Omaha, Neb., Wright & Wilhelmy Co.; Sioux City, Ia., Knapp & Spencer Co.; Kansas City, Mo., The Harbison & Modica Mfg. Co.; Kingston, N. Y., Canfield Supply Co.; Portland, Ore., F. W. Isherwood, Esq.; Hamilton Ont., The D. Moore Co.

Economy Gas Heating Stoves and Ranges

Are the acknowledged leaders of the world. They are carefully made of the very highest class material, beautifully ornamented, and are quick and powerful heaters.

Material, workmanship, Style and Economy of fuel are only a few of the points where the *"Economy"* surpasses all others.

THEY DELIGHT CUSTOMERS AND ARE

BUSINESS GETTERS

Write for catalogue and prices, then secure the agency for the ORIGINAL ELEVATED OVEN Gas Range, as well as the ORIGINAL Circulating and Ventilating line of Gas Heating Stoves.

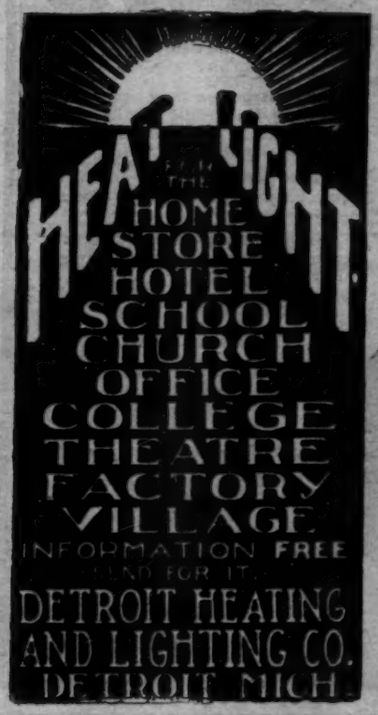
The largest line of closed front fuel stoves in the world.

We manufacture Gas Goods only and devote our entire time, energy and capital to doing it well.

Economy Stove Co., Cleveland, Ohio.

AGENCIES:

RICHARDS & CONOVER HDW. CO., Kansas City, Mo.
STEELE HDW. CO., Parsons, Kansas.
M. F. TALLMAGE, Buffalo, N. Y.



The GOLD COIN

A STOVE WITH AN EXCEPTIONALLY POWERFUL BASE RADIATION

Here is a Base Burner that NO dealer can afford to neglect giving his attention.

It has ALL of the features demanded by Stove users and some of its own that they will appreciate.

Powerful Radiation with economy in fuel consumption; simplicity and convenience of operation; durability; elegance and originality of design—These are all features and besides:—

This is the only Ventiduct Base Burner on the market—all others are imitations.

It offers a splendid opportunity to progressive dealers.

Write for Catalog to-day.

CHICAGO STOVE WORKS
Blue Island Ave. and 22nd St.
CHICAGO, ILL.

Mimco Solderless Couplings

NO SOLDER (Patented) NO SOLDER

Do away entirely with wiping joints. A practical article and BIG SELLER.

Send for Descriptive Circular and Price-List.

MODERN IMPROVEMENTS MFG. CO.
486-470 17th Street • BROOKLYN, N. Y.

The MONITOR RADIATOR

BASE BURNER WITH FIVE FRONT FLUES

has *1683 Square Inches* more Radiating surface than any other Base Burner made.

THE BIGGEST SELLER ON THE MARKET

You should secure the Agency at once. *Write today to*

PAXTON & GALLAGHER CO., Omaha, Neb.
Exclusive Distributors for the West

"Ability is of little account without opportunity," said Napoleon I. Advertising supplies or creates the opportunity.

Our Strictly New Furnace

Built to the Hour

A Powerful Perfect Worker

OUR NEW ONE

WHATEVER IS GOOD, NEW AND MODERN IN FURNACE MAKING HAS BEEN CONSIDERED IN THE PLANNING AND BUILDING OF THIS FURNACE. * HEAVY STEEL PLATE IS DESIRABLE FOR QUICK HEATING WE HAVE IT IN THE LARGE RETURN RADIATOR. * HEAVY CAST IRON IS DESIRABLE FOR DURABILITY IN FIRE SECTION, WE HAVE IT THERE. * LARGE DOORS ARE DESIRABLE, WE HAVE MADE THEM LARGE. * PROMPT RELIABLE ACTION IS ESSENTIAL, THEY ARE HERE CORRECTLY AFFORDED.

THERE IS NO MORE SATISFACTORY FURNACE THAN THIS. THEY MAY TIE IT BUT THEY CAN'T BEAT IT. HEAVY STEEL HIGH RETURN RADIATOR WITH CAST TOP AND BOTTOM. ASBESTOS PACKED JOINTS EVERYWHERE. BIG FIRE-POT, BIG ASH-PIT, BIG CLEAN-OUT, BIG DOORS GROUND TO PERFECT FITTING. HEAVY SEPARATE GRATE BARS. DUST TIGHT. GAS TIGHT. A VERY COMPLETE MODERN FURNACE THAT WILL SATISFY BOTH YOU AND YOUR CUSTOMERS.

WALTER S. RAIT & CO.

211-213 Lake Street, CHICAGO, ILLINOIS.

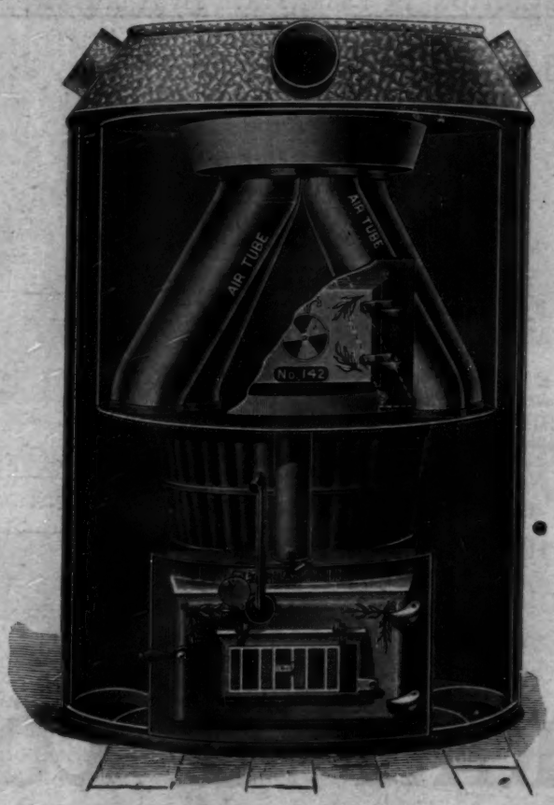
BOYNTON'S

Square Pot Crusader Furnace

One of the many different styles of Square Pot Furnaces with genuine talking and selling points now being manufactured and sold to the trade by

THE BOYNTON FURNACE CO.

147-149 Lake St., CHICAGO. 207-209 Water St., NEW YORK.



Western Distributors, Day K. Smith & Co., Kansas City, Mo.
Michigan Agents, The Wormnest Stove & Range Co., Grand Rapids, Mich.

100 Series Fox Furnaces

Figure up the radiation on this furnace and you will not question which is the best furnace to buy.

The tubes are cast iron, taking air at the top of the fire pot and passing the air to be heated over the top of the fire, the hottest part of the furnace.

The steel used in this furnace is 8-gauge.

The joints are all cup joints mounted with asbestos rope and Salamander cement and we warrant them to be permanently gas and dust tight.

The doors are large and well fitted.

Castings are heavy.

Fire pots straight.

Furnace is low down so you can get it in any cellar.

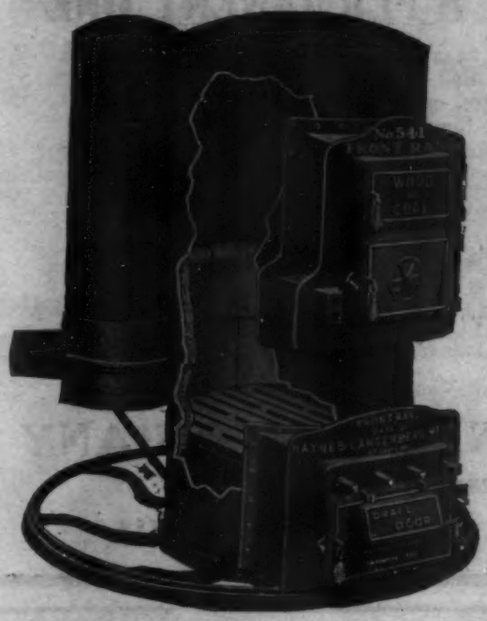
Use FOX FURNACES and you will soon have many satisfied customers and money in the bank.

Write to-day for catalog and prices.

The Fox Furnace Company

ELYRIA, OHIO

When The Votes Are Counted



it will be found

The People Rule

We have

Elected

to supply

The People's Choice

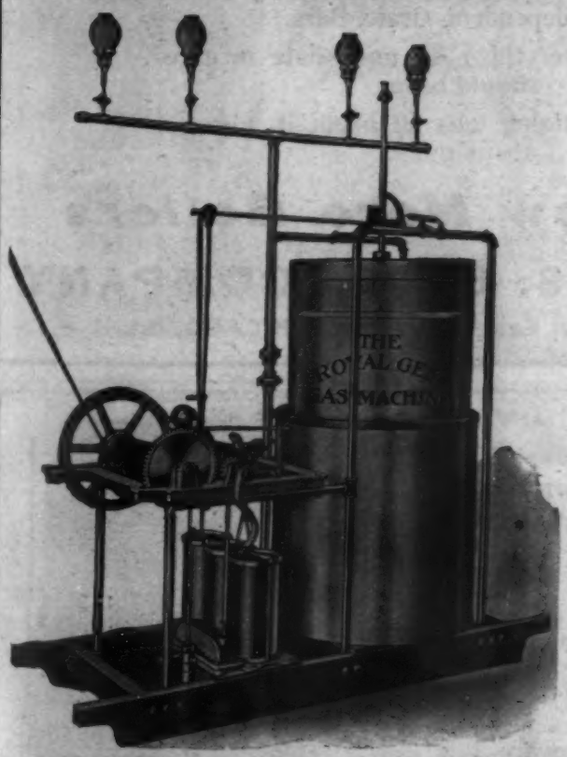
better than ever before, so have opened a Branch Salesroom and Stock at 211-213 Lake St., Chicago, where the trade of the West and Northwest can be better supplied with the **Best Steel Furnace** ever made.

Catalog and Printed Matter on Request

HAYNES-LANGENBERG MFG. CO.

4045-4057 Forest Park Boulevard :: :: ST. LOUIS, MO.

211-213 Lake Street, CHICAGO, ILL.



The "Royal Gem Gas Machine"

THIS machine embodies every requirement of a good gasoline gas generator. It produces a nice, even quality of gas, regardless of the number of lights burning. It is easily controlled by adjusting the stroke of the gasoline injector.

An important feature of a gas producer is the pressure. The brilliancy of a gas light depends on the pressure as much as the quality of gas. Results from tests prove that high pressure consumes 50% less gas than a low pressure, to get the same quality of light. The "Royal Gem Gas Machine" will produce *any desired pressure.*

This feature makes it the most *economical* gas producing machine made. It is simple, safe, durable. Comes all set up ready to connect to the pipe and storage tank. Does not require a special burner or mantle. Has no complicated mixer to adjust—nothing to get out of order. It is having a very large sale.

Sent on 30 days trial to responsible parties.

Send for Circular and Prices.

J. E. WHITACRE MANUFACTURING COMPANY

No. 1426 Rock Street, - - ROCKFORD, ILL.

WHEN YOU SELL A CUSTOMER MAKE HIM A PERMANENT ONE

HOW? Sell him an article of Quality—one that will satisfy and please him — one he will tell his friends and neighbors about, not only tell them about it, but also tell them where he bought it.
"MUELLER" Furnaces never fail to make permanent customers.

Dealers can readily explain to their customers why the "MUELLER" costs more than a cheaper heater; can also show where the customer gets his money's worth for the higher price he pays.

The "MUELLER" is the heater with a reputation—52,000 in use—known in all parts of the country.

Would you like the Agency? It's for you to say.

L. J. MUELLER FURNACE COMPANY

ESTABLISHED 1857

191 REED STREET MILWAUKEE, WIS.

The Hero Furnace

For any kind of Fuel

Showing Smith's Cleanable Water Heater

Cast or Steel Radiator.
Large Double Feed Doors.
Independent Grate Bars.
Everything an up-to-date furnace should have.
Catalog tells all about it, also about our

New Hero Boilers

CHAS. SMITH COMPANY

101 East Lake Street, CHICAGO, ILL.

ANY SIZE ANY STYLE

But Only One Quality—THE BEST

THAT IS WHY THE

FLORAL CITY FURNACES

have occupied the proud position of leaders in furnace construction for years.

For **durability, economy, power** and **satisfactory service,** this line is without an equal, and as long as quality is considered, it is sure to retain its place at the head.

Write For Our Latest Catalogue.

MONROE FOUNDRY & FURNACE CO., MONROE, MICHIGAN.

Clean and Tight Like a Boiler

We have erected a new factory in which we installed new 13 ton riveting machines, with which riveting is done by pressure rather than by hammering. This insures all the joints of

American Furnaces

being absolutely tight

DEALERS: A Sample Furnace will be shipped to any responsible dealer in the United States and if after careful examination (we allow you 30 days) it does not prove entirely satisfactory, it can be returned at our expense.

If you are looking for something better, do not fail to investigate.

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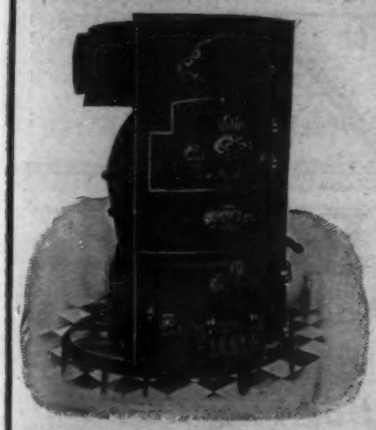
1911-15 Pine Street, ST. LOUIS, MO



OUR NEW DE HAVEN ALL CAST FURNACE

Strictly Modern and Up-to-Date in Every Respect

All the latest features in modern furnace construction are embodied in the make-up of this furnace.

FEATURES: Extra Heavy; Gas Tight; Burns all grades of Hard Coal, Soft Coal and Wood; Simple and Economical to Operate; Top Return Flue Radiator; Large Radiating Surface; Roller Bar Grate.

Write to-day for Catalog and Prices.

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NILES, OHIO

Manufacturers of the Celebrated LION-APEX and BESSEMER Series of Furnaces.

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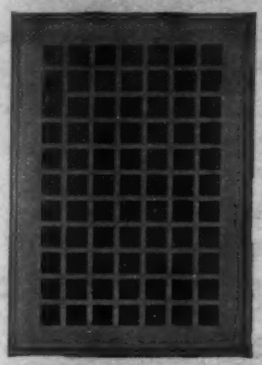

Variety—Quality—Efficiency

168 Sizes Floor Registers in five designs Vertical Wheel.
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37 Sizes Convex Registers in three designs.
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42 Sizes Mouse Proof Vent Plates.
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6 Sizes Reversible Wafers in two designs.
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43 Sizes Lock Asylum Registers in two designs.
135 Sizes Wall Frames 2" and 4".

FERROSTEEL CAST—WROUGHT STEEL—MODIFIED STEEL.

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A Burning Question

Is one that concerns every user of a heater. Therefore the economy in fuel that is saved in the XXth CENTURY construction is an important item. Dealers recognize this fact, which accounts for our steadily increasing sales from year to year.

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Water Tube Sectional Boilers, Radiators and Supplies, Warm Air Furnaces, Registers, Casing Rings & Fittings

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A hard coal furnace without an equal. It is Best in Construction, Durability, Power and Economy. Write for Catalog

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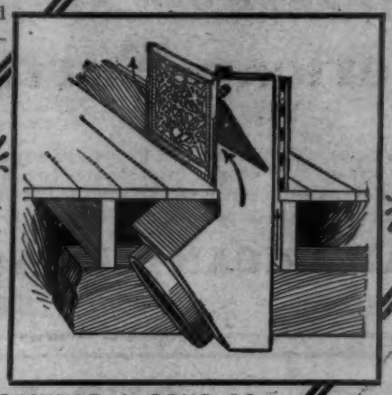

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Simple, Positive, Absolutely Satisfactory.

Get Our Booklet —FREE— "Modern Methods of Heating"

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Fill Out, Cut Off, and Mail. Do It Now.

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Hard Coal Furnace ☐
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Registers.. ☐ Pipe, etc.. ☐

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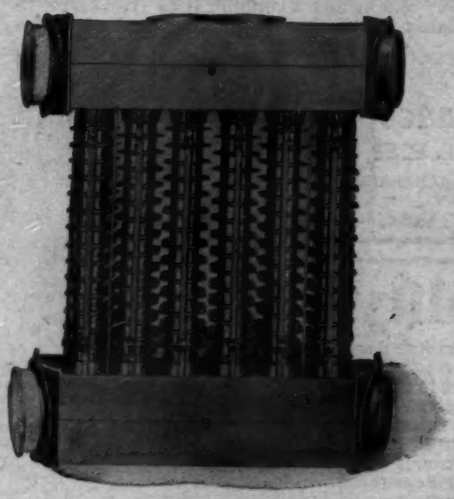
City..... State.....



Radiating Manifold
Note the Radiating Surface.

Forbes Furnace

1908 Addition

Particular Attention is called to our

New Radiating Manifold

Made Exclusively of Cast Iron. No Joints in Flues. Therefore Absolutely Gas Tight.

The Forbes Furnace burns either Hard or Soft Coal and is Fully Guaranteed in Every Case.

Write for our Booklet.

Ask for our Agency Proposition.

Tubular Heating & Ventilating Co.
228 Quarry St., Philadelphia

The Proper Quality and The Proper Quantity

OF HEATED AIR IS ASSURED BY

The New Solid Comfort Furnace

There is not another furnace made that has more selling points that will appeal directly to prospective furnace buyers than this furnace, as the following list of features will demonstrate:

Features:—**It is easily controlled and regulated. Responds quickly when drafts are turned on. Can be checked immediately. Is Powerful and Economical. Perfectly Constructed and Durable. Gas-tight, Dust-tight and Smoke-proof.**

Every Dealer Should Handle It!

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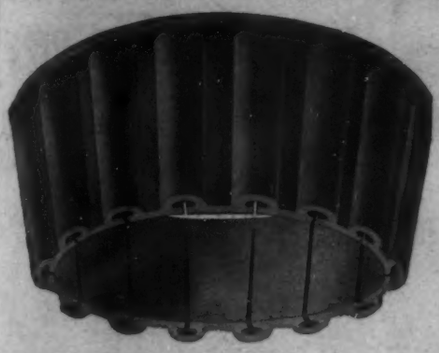
WHY BURN MONEY WHICH CAN BE SAVED?



Why not give your customer a furnace which is provided with a smoke consuming fire-pot which will burn the smoke, and thus save the money? **Fuel raised to a red heat without a mixture of air enough to produce combustion disengages its carbon in fine powder forming smoke,** and this smoke passes up the chimney.

Green's Base Heater Furnace

and

Green's Colonial Furnace

are provided with slotted fire-pots, which provide a means by which air may be let in upon the fire at all points of its circumference from beneath to the end of the perfection of the combustion no matter what character of fuel may be used.

Your customers will be glad to pay $25.00 to $35.00 more for a furnace which will save them money every year in coal bills. The furnace will cost you no more than any good furnace, your customers will be pleased, and you will be able to build up a large furnace business.

Write for our new catalogue and discounts.

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Hot Water Combination Boilers

They Fit Any Furnace

So constructed that they may be placed directly at the top of the fire, in which position their large surfaces are subjected to the strongest fire, making them powerful heaters. Adapted for use with ALL KINDS of fuel. Will increase the heating capacity of any furnace and reduce the coal bills.

Manufactured only by

FRANK D. STOLZ

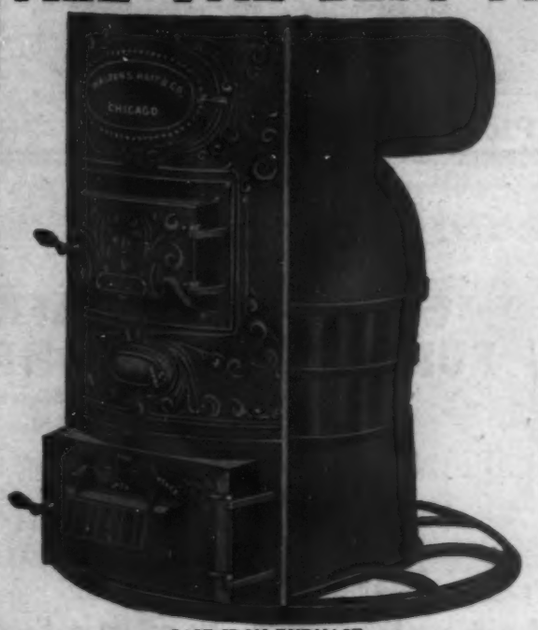
156 Webster Ave., Chicago, Ill.

ALL THE BEST FEATURES

—in—

Furnace Making have been embodied in our

All Cast Iron Furnaces



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Absolutely Gas, Smoke and Dust Proof.

Simple, Durable and Powerful.

Water Heater may be introduced without drilling.

Write for printed matter of our complete line.

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Simplicity, Durability, Economy and Capacity

All of which are essentials of the really Good Furnace, are featured in the

MONCRIEF

TOP RETURN FLUE WARM AIR FURNACE

This is a furnace which is unsurpassed for operation and durability.

FEATURES: Burns all grades of hard and soft coal; all cast iron; Moncrief Duplex Grate; large radiating surface; double fire-pot; large grate surface and cleanliness in use. Write for catalogue.

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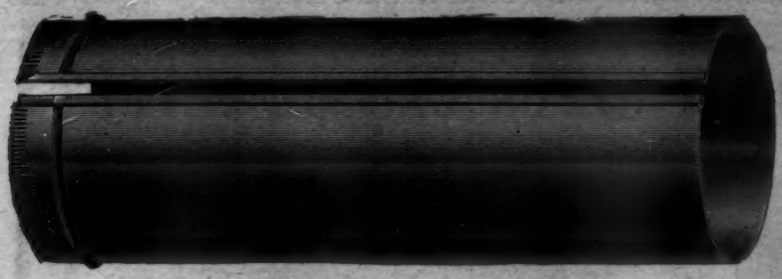
J. C. KIMMEL, 2314 E. 15th St., Kansas City, Mo., Western Sales Agent



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50 Feet of Pipe Nested for Shipment

Something New Under The Sun

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(Patent Pending)

Great Saving Effected:

IN SPACE (occupies 1-25th that of ordinary Pipe).

IN WEIGHT (no huge, heavy crates needed).

IN FREIGHT (†ships as 4th class in less than carlots; 5th class in carlots).

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IN LOSS (no damage in transit or handling).

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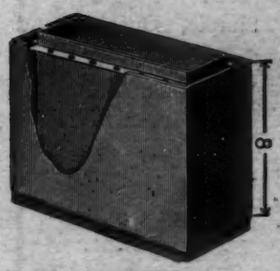
Send for Catalog and Prices to the Makers.

The EXCELSIOR Steel Furnace Co.

36 West Monroe St., CHICAGO

Also, FURNACES, REGISTERS, STOVE PIPE AND ELBOWS.



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Corner Brooklyn and Abbott Streets,

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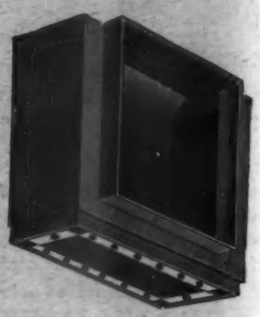
The STIFFEST and BEST Machine-made Pipe on the Market.

The only Sectional Furnace Pipe made in which the Inner Walls Form the Cross Walls.



No Wings to Pull Out. Write For Catalog. No Cleats to Bend.

Our Large Factory Insures Prompt Delivery.

We are not Connected with any Combination. Do not get us Confused with Other Manufacturers.

The FUEL$AVER

Will Add $75 to $750 to Your Profits

¶ It's a new automatic heat regulator for furnaces. Keeps the temperature uniform. Reduces the coal bill 25%. Low in price and pays a big profit.

¶ Write for particulars today.

F. D. KEES MFG. CO., - Beatrice, Nebr.

F. D. Burgess, Waupaca, Wis., writes:

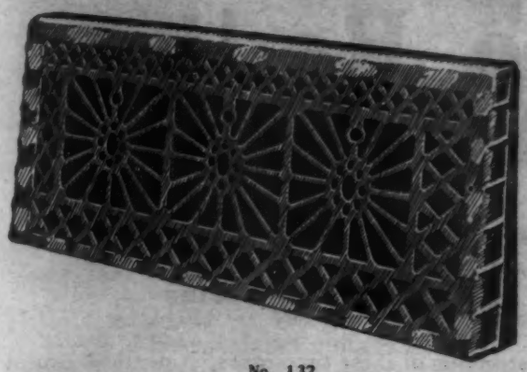
"Please take out advertisement for Tinner, I have one in sight that I think I shall get. I have had all kinds of letters from men in this state, Ills., Iowa and Minnesota. I am running tin and plumbing shop here in connection with the Union Stove Co."

The Jones Side-Wall Registers

Are used in connection with

THE JONES SYSTEM OF HEATING

THE NEW JONES SIDEWALL COLD AIR FACE



by more than **6000** of the leading furnace dealers in the United States and Canada.

No. 15 JONES REGISTER
For first floor rooms. Bottom Collar, 7x13¼
These registers are fitted with a top collar which fits 3¼x13 Wall pipe, where two rooms, one above the other are to be heated or a plate when used for heating one room on the first floor.

No. 132
Dimensions 14 in. high by 32 in. long. Air opening 288 square inches.
LIST PRICE
Black Japan $7.00; Electro plated, Ox. Copper, Brass or Nickel..$11.00
No. 115, Dimensions 14 in. high by 16 in. long. Air opening 154 sq. inches.
LIST PRICE
Black Japan $3.00; Electro plated, Ox. Copper, Brass or Nickel...$4.50
No. 114½ is the same design as No. 115. Dimensions 14 in. high by 11½ in. long. Air opening 112 square inches.
LIST PRICE
Black Japan $2.75; Electro plated, Ox. Copper or Nickel.....$4.00

No. 114. Dimensions 14 in. high by 16 in. long. Air opening 129 sq. inches. This face does not extend from the wall at the bottom as much as does the 132, 115 or 114½.
LIST PRICE
Black Japan $2.75; Electro plated, Ox. Copper, Brass or Nickel...$4.00
No. 113 same design as No. 114. Dimensions 12½ in. high by 14 in. long. Air opening 80 square inches.
LIST PRICE
Black Japan $2.50; Electro plated, Ox. Copper, Brass or Nickel...$3.50

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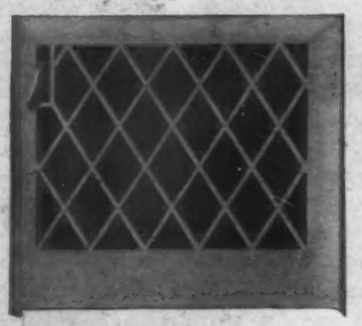
OR TO BRANCHES: THE UNITED STATES REGISTER CO., Ltd., 104 Second St., North, Minneapolis, Minn.
THE UNITED STATES REGISTER CO., Ltd., 517 West 5th Street, Kansas City, Mo.
THE JONES REGISTER CO., 732 King Street West, Toronto, Ont.

T. & B. "Special" **Baseboard Registers** "Imperial"

All Your Requirements for

BASEBOARD HEATING

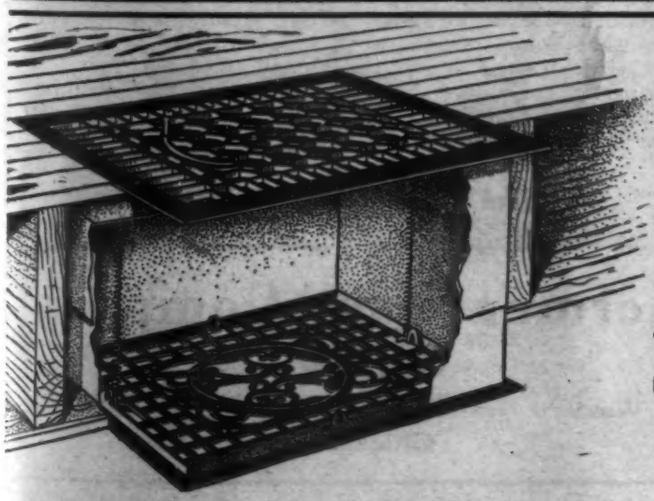
are covered by These Two Registers



Tuttle & Bailey Mfg. Co.,

The face is attached by inserting one screw at the top

NEW YORK CHICAGO BOSTON



STOP SELLING WHITE REGISTER FACES

We have Something Better

A Black Floor Register
A White Ceiling Face
An Adjustable Sheet Metal Box Connecting the Two
Fits in any Ceiling

The Independent Adjustable Ventilator

INDEPENDENT REGISTER & MFG. CO.
CLEVELAND, OHIO

GET OUR SPECIAL INTRODUCTORY OFFER
It will Interest You

Radiant Home Specialties

Four Sizes—Nos. 622, 624, 626, 628

Four Sizes—Nos. 722, 724, 726, 728

The Radiant Air Blast

Two Series

Four Sizes to Series

The construction of these two stoves is identical, except that the No. 722 Series is more elaborately dressed in order to meet that demand, having legs and skirts nickled; with wings, corner heads and deflector nickel extra.

This style of air tight is superior to any other on the market for several reasons.

First, the universal complaint against air tights is that they do not heat the floor. In this stove the defect is remedied by stopping the jacket at the top of fire pot, leaving the fire pot and base with deflector ring above for floor radiation, as it should be.

Second, air tights generally expose the unsightly dome to view, and are poor double heaters. By using a comparatively tight jacket the dome is covered and the double heater qualities are reinforced.

Third, the Radiant Home Air Blast Fire Pot used in conjunction with the Force Draft Ring (patented) gives a superheated hot blast which produces the nearest to perfect combustion yet to be obtained.

Fourth, the inside dome, protecting as it does the jacket from immediate contact with flames, prevents the heat from burning off the blackening. Once a year is all the blackening this stove needs, which is quite an item for the user.

Fifth, this stove burns all grades of fuel; soft coal, especially the poorest grades of slack and coal dust; coke; lignite; hard coal from pea size up; and wood; giving the best combustion and greatest economy.

Sixth, the dome is large and cast in one piece, making a roomy combustion chamber and radiator, and being in one piece it cannot leak. The dome is mounted to the fire pot top with a pocket joint, making the whole arrangement gas and air tight.

Seventh, the double heater attachment gets its supply of cold air from four flues, one in each corner of stove opening under deflector ring at top of fire pot; also through the two horse shoe ornaments, one at each side of the stove. The cold air is carried across and around the dome, the hottest part of the stove, and then delivered to hot air pipe. This gives a strong double heater or a powerful circulator if used as a single heater

For Hard Coal, Order Half Height Cells

Germer Stove Company

Erie, Pa.

Western Branch: 231-247 Newberry Ave.
Chicago, Ill.

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

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DANIEL STERN, PUBLISHER AND PROPRIETOR,
355 DEARBORN STREET, CHICAGO, ILL.

Entered as Second-Class Matter June 25, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, OCTOBER 31, 1908.

THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1908 TO NEW SUBSCRIBERS FOR THE YEAR 1909. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF 1909.

The British Patent Law.

THE NEW British patent law which is now in effect and which provides that no foreigner can hold a patent in England unless he manufactures the article patented in that country, is said to be causing considerable excitement and speculation in England as to what effect it will have upon foreign manufacturers. Many English people imagined that Americans would be among the first to rush to protect their threatened interests by immediately acquiring English factory sites and beginning to produce their patented articles. To the surprise of the English people, however, Americans do not seem to be the least bit flustered by the new act. American manufacturers do not appear to be making a big rush for building land, and with the exception of a few American firms who find the employment of British cheap labor advantageous, there is said to be absolutely "nothing doing." Several English papers recently published the statement that $125,000,000 of "foreign" capital—a considerable portion of it being American—had already been invested there. More recent inquiry, however, elicits the fact that practically none of this capital is American. It is quite true that a large sum is being spent by German manufacturers in putting up factories in various parts of England, but Americans do not appear to be making much stir in this direction.

There is a loop hole in the British patents act, and it is stated that American manufacturers are looking through it, waiting to see just what is going to happen to the German firms. The law states that in order for an article patented in Great Britain to be fully protected in that country it must be manufactured there to an "adequate extent," and Americans are said to be waiting to learn what constitutes an "adequate extent." The precise effect of the British patent law upon industries in the United States cannot be told as yet. It appears, however, that after an American manufacturer has established a factory in the United Kingdom he is likely to require fewer workers in the United States. Already some American patent lawyers have voiced a demand that the United States laws on patents be amended along the lines of the new British act.

There is no doubt that the new law is proving effective in promoting industrial development on the other side. This is evident from the report that United States Consul Frank W. Mahin of Nottingham, England, has recently forwarded on the effects of the new law on foreign patentees. It is in part as follows:

"The representative of a British firm making a specialty of securing factories and factory sites for applicants is quoted to the effect that many applications have been received from foreigners, induced thereto by the provision of the new law requiring articles patented in the United Kingdom to be manufactured here. An important feature of the applications already made is that the manufacturers demand works much larger than are necessary to make the patented article, giving as the reason that they can not run works in England on the patents alone, and therefore intend to make other goods which have hitherto been imported ready-made. Consequently, the volume of new manufacturing business brought to this country is expected vastly to exceed what is directly attributable to the influence of the new law.

"It is stated that nearly 2,000 patents are now within the scope of the law, and if these were all manufactured in this country, 30,000 to 40,000 people would be given employment."

Wire Screens in Great Britain.

NOTWITHSTANDING the fact that the English people are not bothered with insect pests to the same extent that people in the United States are, it is pointed out by Consul Albert Halstead of Birmingham, England, that if American manufacturers of wire screens would employ the best approved methods of salesmanship in the United Kingdom, that country would, in time, become a profitable market for wire screens for all kinds of houses. Consul Halstead says that American manufacturers of wire screens have failed properly to exploit the British market.

As a result of a report from the United States' consulate at Birmingham, made about two years ago, one of the principal American manufacturers of wire screens entered the English market by appointing a special agent there. The business, however, was later left with London merchants, with the result that the market has not been exploited to such an extent as it would seem to warrant. It is true that people insist that the insect pest in Great Britain is not sufficient to make the sale of wire screening a profitable undertaking, but Consul Halstead expresses the opinion that if American manufacturers would select agents who know the people and their customs, and who are able to demonstrate the real utility of wire screens, that a profitable market for this commodity would in time be developed in Great Britain. The consul points out, nevertheless, that Americans undertaking to sell wire screening in the United Kingdom should not expect immediate profitable results, but that they should re-

gard the expense of entering the British market as an investment of capital upon which returns may later be expected.

The matter was brought to the consul's attention by an article in a Birmingham paper which described the difficulties in the public market there during a protracted period of warm weather when flies were found to be a great nuisance. The consul also noted in a leading Birmingham paper, the following excerpt from an article from its London correspondent:

"Mr. Burns' energy at the local government board is finding an outlet in various directions which have not hitherto been covered by that department, and one of the latest ideas emanating from the board is the institution of an investigation by specially appointed experts into the subject of flies as carriers of disease. Scarcely a more useful inquiry could be started, and the professor of biology at Cambridge is named as one of those who will conduct the investigation, which is also to receive assistance from the experts at South Kensington."

The consul says that if the foregoing investigation shows, as it has shown elsewhere, that flies are dangerous carriers of disease, the publication of this report should help the people of the United Kingdom to realize the importance of protection against these pests by screens, and should make the introduction of these articles next summer in England an opportunity that should not be neglected. In view of the importance of the United Kingdom as a distributing point for the rest of the world, it would appear that the establishment of an agency in London, for instance, would make it easier to sell wire screens to those countries which are accustomed to place their orders in the English market.

Data on Timber Supply.

THE National Conservation Commission has instituted the first comprehensive attempt at a census of the standing timber in the United States ever undertaken. The commission needs the information to help complete its inventory of the country's natural resources, which it will include in its report the first of next year. Estimates as to the amount of standing timber in the United States range all the way from 822,862,000,000 to 2,000,000,000,000 board feet, a difference of more than a trillion feet in the views of the best qualified authorities of the country.

In the opinion of the Forest Service the most carefully prepared estimates yet made were those published by the twelfth census in 1900, which placed the total stumpage at 1,390,000,000,000 board feet. The census is expected to give an accurate basis for computing how long our timber supplies will last. The consensus of opinion is that the present annual consumption of wood is about 100,000,000,000 board feet. A leading authority has placed it as high as 150,000,000,000 board feet. Assuming a stumpage of 1,400,000,000,000 board feet, an annual use of 100,000,000,000 board feet and neglecting growth in the calculation, the exhaustion of our timber supply in fourteen years is indicated. Assuming the same use and stand with an annual growth of 40,000,000,000 feet, a supply for twenty-three years is indicated. Letters have been sent out broadcast by the commisson to county clerks asking for statements as to forest areas in their counties. Seven thousand lumbermen and timber land owners have been asked to supply similar information. These letters also ask for a wide variety of information, including not only the lumbering and milling industries but all others even indirectly dependent upon the use of wood.

An estimate that the losses during the months when forest fires have been prevailing in various parts of the United States have aggregated $1,000,000 per day has been made by the Department of Agriculture. The Forest Service in a statement issued on September 30 says that probably in every instance the devastating forest fires might have been prevented if the several states had provided an adequate number of men to patrol the woods and arrest the fires in their incipiency, and if lumbermen and other users of the forest had been careful to dispose of brush after logging so as to prevent the spread of fires. In view of the fact that the loss from timber destroyed in 1908 will be much larger than last year, and it is doubtful if the exact losses will ever be known, it is highly important that something should be done to stay the ravages of the fire fiend in the forests of the country. How this can be accomplished we would not say, but the fact remains that unless immediate and aggressive action is taken our forests will be depleted before we are aware of it.

Steel Report Shows Gain.

THE earnings of the United States Steel Corporation for the three months which ended September 30, amounted to $27,106,274. This was an increase of nearly $7,000,000 over the previous quarter, and better by from $1,000,000 to $2,000,000 than was looked for by steel men. Unfilled orders on the books of the corporation at the close of the quarter totaled 3,421,977 tons, an increase of 108,000 tons over the orders on hand at the close of the June quarter. This is the first time since the depression of business began last fall that the steel corporation has reported an increase in unfilled orders.

One of the most satisfactory features of the report is that each month of the quarter showed an improvement over the previous month. The July earnings were $8,599,630, the August earnings $9,152,311, and the September earnings $9,354,333. How these earnings, making a total of $27,106,274 for the three months, and the unfilled orders at the close of the quarter compare with the showing for previous quarters this year and with the corresponding quarter in previous years is shown in the following table:

	Earnings.	Unfilled Orders. Tons.
September 30, 1908	$27,106,274	3,421,977
June 30, 1908	20,265,756	3,313,876
March 31, 1908	18,229,005	3,765,343
December 31, 1907	32,553,995	4,624,553
September 30, 1907	43,804,285	6,425,008
September 30, 1906	38,114,624	7,936,884
September 30, 1905	31,240,582	5,865,377
September 30, 1904	18,773,982	3,027,436
September 30, 1903	32,422,955	3,278,742
September 30, 1902	36,945,488	4,843,007

There is every indication that before long the steel

business in the United States will be as large as it ever has been.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

Graduates of the new consular school are not consulted as to where they are to take up their abodes to guard the interests of Uncle Sam. For example, the other day there was packed off, bag and baggage, to distant Zanzibar, Arthur Garrels, a young St. Louis actor, who, after tiring of the sock and buskin, the wig and grease paint, yearned for a sight of foreign fields. This young Thespian got the wanderlust when a few years ago he toured the far East and Australia with a dramatic company. Being a linguist—a qualification now prerequisite to entrance in the consular service—and being versed also in the tenets of commercial law and political economy, now also essential to a consular commission—he had no trouble in passing the stiff competitive examination which has fortunately been substituted for the former "pie counter" or "plum tree" system of filling consular berths. Mr. Garrels got his taste of commerce while engaged in his father's export business prior to his debut before the footlights, and inasmuch as he has had experience also in the investment and brokerage business, he was deemed the right man for a foreign berth. In Zanzibar, away around on the far side of the big leg of mutton of Africa, he will have ample opportunity for gathering data for stage settings strictly wild and savage, should he wish to do some play-cobbling between writing of ship's papers. He will find hot weather the year round in the island of Zanzibar, which lies in the Indian Ocean but a few degrees south of the equator. Although a British possession, it is off German East Africa. To reach it Mr. Garrels will have a sail of some 9,000 miles, requiring upward of three months. Not having contracted the Thespian habit of marrying early and often—being, in fact, a bachelor—Mr. Garrels will not have to maintain a very large establishment in this paradise of crocodiles and pickaninnies.

* * *

Down where the Congo rolls to the sea, to a much wilder country, another Yankee consul, W. W. Handley, a native of Washington, D. C., has taken his departure. Mr. Handley will be stationed at Boma, just within the mouth of the Congo, in the Congo Free State. Another consul just sent to Africa is William Coffin, a young man from Brooklyn, N. Y. He will be located in Tripoli, the capital of the country of that name, which lines the northern or Mediterranean coast of Africa between Egypt and Algeria. Although in a land of white-sheeted Moors and blood-thirsty pirates, Mr. Coffin will be more comfortably situated than in Maskat, to which vacant post in Oman, the northeast corner of Arabia, some fresh graduate of the new consular school will probably be sent. Punta Arenas, the bottommost town of the earth, is now, for the first time, I am told, going to have an American consulate, which will be the most isolated post in the service. The occupant will be John E. Rowan of Thompsonville, Conn., who has had quite a varied career as a clergyman, newspaper man and politician. A newspaper man and a new graduate from the consular school is Douglas Jenkins of Greenville, S. C. Mr. Jenkins goes to the French island of St. Pierre, off the south coast of Newfoundland. He will find his new home in great contrast with his former home in South Carolina. St. Pierre, as I remember it when I visited it many years ago, is a barren island absolutely devoid of trees or shrubbery. It is a typical French town of the quaintest type, where as much business is transacted as in most towns five times its size. It is, however, one of the bleakest spots that exist on the globe. Things are certainly different from what they used to be in this business of dealing out consular plums. The powers that were used to ask boys where they wanted to go, and if it could be arranged they went or stayed at home. Now it is a civil service examination which gives all native-born citizens an equal chance to get their names upon the eligible register and into the consular school.

* * *

Miss Lou Cosgriff of Chippewa Falls, Wis., is believed to be the world's champion microscopic writer. Miss Cosgriff, it is said, has just completed the feat of writing 8,679 words on the back of a United States postal card, measuring 3⅛x5½ inches. The writing, as I would naturally suppose, is scarcely readable with the naked eye, but is distinct under a microscope. Miss Cosgriff used pen and ink, but how she managed to cram so many words into such a small space is a puzzle to me. I haven't heard what it was all about, though I am prepared to bet that it was nothing of the nature of a *billet doux*, for I am sure Miss Cosgriff would not go to all that trouble to tell the best man that ever lived how much she loved him. I am not told whether Miss Lou wrote on the edges of the card or not, though I see no reason why she could not have found room there at least for a few words.

* * *

Here are a few verses that I purpose adding to my peerless collection of "near" poetry. As will be observed they are intended to advertise the "O. I. C." washing-machine of the H. F. Brammer Mfg. Co. of Davenport, Iowa.

THE "O. I. C."

The "O. I. C.," that is my name,
From Davenport, Iowa, I came.
I wash your clothes and make them white,
And make your washday labors light.

I am not cranky nor hard to run,
The work ain't hard—it's almost fun;
Then get me sure and you'll be in it.
I almost wash a shirt a minute.

I've come a thousand miles or more,
You'll find me now in every store;
In Davenport is where I'm built,
I wash your clothes, your wraps, and quilts.

Just look above and see that face,
The happiest man of the human race;
Why should you doubt it when 'tis seen
He owns an "O. I. C." machine?

News Siftings

The Weir Stove Company of Taunton, Mass., is building an addition to its plant.

The Advance Stove Works of Evansville, Ind., will erect an addition to its molding department.

The Everett Stove Company of Columbus, O., has been incorporated with a capital stock of $2,000 by R. A. Carran and others.

The Omega Gas Stove Mfg. Co. at Ardmore, Okla., has about completed its plant to manufacture gas heating stoves. Wilson Newman is president of the company.

Krekel Bros. Co. of White Plains, N. J., have been incorporated with a capital stock of $25,000, to manufacture stoves, ranges, heaters, boilers, etc. The incorporators are Charles L. Krekel, Henry W. Krekel and Herman Berje.

The Mountain State Gas Stove & Mfg. Co., of Moundsville, W. Va., has started up its plant after a protracted period of idleness. The company reports a large number of new orders on hand sufficient to keep the plant busy for some time to come.

The Dighton Foundry Co. has been established at North Dighton, Mass., to succeed the old business of Dighton Furnace Co. Mr. Fred Leonard is manager of the new concern, and it is his present intention not to sell to the trade, but to do a catalogue house business in stoves, ranges and furnaces.

The Automatic Cooker Co., Elkins, W. Va., has been incorporated with a capital stock of $10,000 to manufacture a patented automatic cooker. The officers of the company are: President, French Nestor; vice-president, L. T. Feaster; secretary, W. K. Harper; treasurer, John B. Wilt.

The Metzner Stove Repair Co. of Kansas City, Mo., has succeeded to the business of C. T. Metzner. There has been an addition of new blood and it is intended to carry a larger stock of stove repairs, etc., than ever before. The new firm promises to make quick shipments and to pay the most careful attention to all orders entrusted to them.

B. J. Taylor, vice-president and general manager of the Toledo Stove & Range Co., Toledo, O., manufacturers of the celebrated "Gem" stoves and ranges, has been the recipient of many compliments upon the "log cabin" that he had in the recent automobile parade at Toledo during "Merchants' Week." Mr. Taylor's automobile, which was transformed into a typical backwoods log cabin, attracted a great deal of attention.

The Hermyer Stove Co., Tiffin, O., are sending out catalogue "H" describing their gas ranges, hot plates and heaters. In designing these goods the Hermyer Stove Co. state that they have kept in mind the fact that the desirable features in gas goods for cooking and heating are efficient service with low gas consumption, attractiveness of appearance and durability. Among the articles described in the catalogue may be mentioned Hermyer range burners, "Seneca Gem" ranges, "Chief" ranges, Hermyer mantle heaters, "Sahara" gas heaters and the "Texas" and "Old Harry" gas heaters, etc.

Jeremiah Dwyer, president of the Michigan Stove Co., Detroit, Mich., is eulogized in a recent issue of the *Detroit News*. Mr. Dwyer's life and characteristics formed the subject of a very lengthy article in that paper in which it was stated that "Jeremiah Dwyer is the best example Detroit affords of the representative American captain of industry whose career has been graced by humanitarianism, good will, charity, philanthropy and kinship with his fellow laborers."

The Monitor Stove & Range Co., Cincinnati, O., which claims to have succeeded William Resor & Co. in 1889 and to all the rights handed down by the firm of W. and R. P. Resor, which was incorporated in 1819, filed suit in the Superior Court at Cincinnati on October 19 seeking to enjoin the E. H. Bardes Range and Foundry Co. from using the name "Resor" on its stoves and from representing itself to be the successor of the Resor Company. It is charged in the suit that the defendant company advertised that it had re-modeled and re-furnished the old Resor factories and would manufacture "Both the Resor and Bardes types of stoves." Besides this, it is alleged that the defendant uses the name "Resor" on its stoves, with "Manufactured by the Bardes Range and Foundry Co." in small letters below it. The Monitor Stove and Range Co. claims that it has been greatly damaged and asks for an accounting upon this issue, while a temporary injunction is wanted which the court is asked to make perpetual.

BORN STEEL RANGES.

The Born Steel Range Co., Cleveland, O., are sending out a supplement to their catalogue No. 16, describing their "Series F" Born steel ranges. Recognizing the demand which exists in some quarters for malleable ranges they have brought out this line in three sizes with and without reservoir. To merit attention in a field already occupied, they state that they have been fully impressed with the necessity of having their "Series F" ranges unusually attractive in quality, finish and price. These ranges, they say, have been carefully made from accurate and up-to-date patterns. The malleable parts include all top castings, oven door frames, hinges, handles and braces, warming closet doors and frames, pouch feed door and frame, wood feed door and the frame for this and the two doors below, also the end draft slide and the top rim around the reservoir. The iron is said to be best quality, tough, smooth and straight. The lids are of good weight with deep rims. As in the case of all Born steel ranges, the steel bodies are double thick and interlined with asbestos board. The outer walls are either of blue polished steel or black japanned, as preferred. The ovens are square and full size, with the company's patent removable bottoms, which are guaranteed against warping. They are ventilated by means of dampers and provided with light perforated steel slides or racks. The fireboxes are fitted with reversible grates for coal or wood and with heavy corrugated iron linings in sec-

tions. The reservoir is regularly made of heavy copper, tinned inside, and holds eight gallons. It is entirely incased in a heavy iron box and provided with damper, also condensation pocket. The Born Steel Range Co. is also prepared to furnish cast enameled reservoirs, if desired. When writing for prices kindly mention THE AMERICAN ARTISAN.

THE "RECORD QUALITY" RANGE.

The "Record Quality" range is a new medium-grade range that is being put on the market by the Quality Stove & Range Co. of Belleville, Ill. It is made with either cabinet or cast leg base. It is a very attractive range, and is said by the makers to be becoming very popular with dealers. The ovens in the various sizes of this range measure 16x20, 18x20 and 20x20 inches, all ovens having a depth of 20 inches. The "Record Quality" has an arched oven top, which gives added strength and prevents bulging and sagging. The oven thermometer with which it is provided accurately records the oven heat. This range has a duplex grate and a sectional hot-blast fire-back. The nickel parts are of plain finish and add greatly to its appearance. When writing the Quality Stove & Range Co. concerning this range kindly mention THE AMERICAN ARTISAN.

"ECONOMY" GAS HEATING STOVES AND RANGES.

"Economy" gas heating stoves and ranges are, according to the makers, the Economy Stove Co., of Cleveland, O., carefully made of the very highest class material and are quick and powerful heaters. The Economy Stove Co. manufacture gas goods exclusively and they state they devote their entire time, energy and capital to doing it well. Their original elevated oven gas range and their original circulating and ventilating line of gas heating stoves are well known to the trade. They claim that they have the largest line of closed front fuel stoves in the world. "Economy" gas heating stoves and ranges are beautifully ornamented and the manufacturers say that the material, workmanship, style, and economy of fuel are only a few of the points of superiority of the "Economy" line. When writing for catalogue kindly mention THE AMERICAN ARTISAN.

THE "SUPREME GOLD COIN" CAST RANGE.

The "Supreme Gold Coin" cast range is an entirely new product of the cast range family. It is manufactured by the Chicago Stove Works, Twenty-second Street and Blue Island Avenue, Chicago. The manufacturers say that it is a particularly desirable six-hole family-size range. It is very attractive in ornamentation and is large and massive in appearance. The "Supreme Gold Coin" has a large fire-box which can be fitted with the Chicago Stove Works' flat draw-center or a duplex grate. The linings of this range are heavy and are well ventilated, and the oven is large and square. One of the most attractive features of this range consists in the fact that the nickel top band, nickel oven door shelf and the nickel wings on the hearth are fastened to the range without the use of a bolt or a screw. These pieces can be removed by simply lifting them off. The "Supreme Gold Coin" cast range will burn coal and wood or wood only. The Chicago Stove Works say that it is destined to become one of the most popular ranges now on the market. When writing for further particulars kindly mention THE AMERICAN ARTISAN.

"NIAGARA" ASPHALT CASTING DIP.

The S. Obermayer Co., Cincinnati, Chicago and Pittsburg, state that their "Niagara" asphalt casting dip is a pure mineral asphalt japan, of good body and high gloss. It is an air-drying article which may be used as a finishing coat on all kinds of castings and metal work, either by dipping or painting. The S. Obermayer Co. says that it will dry dust-proof in 30 minutes to one hour, according to conditions. It is not an oil or baking japan and it requires no heat. It is intended only as a mill finishing coat, but it is said to make rough castings attractive and to increase their selling value much more than the slight additional cost for its use. When writing The S. Obermayer Co. for further particulars regarding "Niagara" asphalt casting dip kindly mention THE AMERICAN ARTISAN.

OBITUARY.

Orville P. Moon.

Orville P. Moon, manager of the Standard Lighting Co., Cleveland, O., division of the American Stove Co., died on October 26 of typhoid fever after ten days' illness. Mr. Moon was born at Martinsville, Clinton County, Ohio, in the year 1867. He entered into business with his father, George R. Moon, at Columbus in the manufacture of ovens for gasoline stoves. He afterwards moved to Lorain, O., where he became connected with the Hull Vapor Stove Co., now the National Vapor Stove and Mfg. Co., and a branch of the American Stove Co. Mr. Moon managed the National division at Lorain for several years, and a few years ago he was transferred to Cleveland, where he was appointed manager of the Standard Lighting Company, which position he held at the time of his death. Mr. Moon's business career was a very successful one, and especially so after his connection with the American Stove Co. as general manager of two of its divisions. He possessed an unusual amount of executive ability, to which fact may be attributed the marked success which attended his identification with the interests of the American Stove Co. He was possessed of a quiet, unassuming disposition which made him many friends and brought him much popularity among the stove trade. Mr. Moon was a member of the Union Club of Cleveland and a thirty-second degree Mason. Profound regret will be expressed by the trade at his demise, which occurred so unexpectedly and at the time of his greatest usefulness. He is survived by a wife and six children. Interment took place on the afternoon of Wednesday, October 28.

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 38 to 43 inclusive.

The tenth annual convention of the Canadian Wholesale Hardware Association was held at Toronto on October 15.

The National Wire Cloth Co., of Niles, Mich., contemplates the erection of a modern plant, with machinery of the latest improved type.

The next annual convention of the Mississippi Retail Hardware Association will be held at Jackson, Miss., on May 11-12, 1909. John E. Sommers is secretary of the association.

The Rock Island Tool Co., of Rock Island, Ill., will erect three new buildings, an office building 30x40 feet, a machine shop 160x80 feet and a foundry 120x80 feet. The buildings will cost, it is said, about $20,000.

Andrew King, who for many years conducted a successful retail hardware business at Ripley, O., died on October 16. Mr. King, who was born in Boston, Mass., was at one time president of the Ripley Hinge Works of Ripley, which has been out of existence for a number of years.

W. B. Heller & Co., Montpelier, O., are sending out an unusually attractive and useful little souvenir in the form of a miniature hand mirror, advertising Heller's steel hardware shelf boxes. It is of a gilt finish and is very neat in appearance. It is rarely that a more attractive advertising novelty has been brought to our attention.

Returning prosperity was the theme at the first meeting since the summer recess of the Hardware Merchants and Manufacturers' Association of Philadelphia held in that city on October 20. The retail dealers reported a healthy increase in all lines of the trade. Manufacturers said that there was an excellent improvement both in the size and number of orders.

The second annual hardware exhibition of the Minnesota Retail Hardware Association will be held in connection with the association's thirteenth annual convention at Minneapolis, Minn., on Feb. 23-26, 1909. The National Guard Armory at Minneapolis will house the exposition. Secretary M. S. Mathews is sending out literature advertising the convention and exposition.

The Parkway Drop Forge Horseshoe Co., 1966 West 26th St., Cleveland, O., are calling the attention of the trade, in a folder that they are sending out, to a new horseshoe which they are introducing for use on all kinds of pavements, especially asphalt. Its merits are: Non-slipping; lightness and durability; level-bearing. It is practically ready for the horse's hoof. This shoe needs, according to the manufacturers, but one trial to give assurance that many of the difficulties found in horseshoeing are, by its use, positively overcome. A horse equipped with these shoes, they say, will travel with a smoothness and confidence which will enable it to give better service with less wear on the animal. The shoes are drop forged from Gantier Toe Cork steel.

Alfred Bowman, for many years a prominent hardware dealer of Franklin, Pa., died at Wilkinsburg, Pa., last week at the age of 73 years. Mr. Bowman was born in Franklin but left there eight years ago and settled down in Wilkinsburg. He was a Civil War veteran, and during his residence in Franklin took an active interest in municipal affairs, serving two years as a member of the Franklin City Council. He is survived by a wife, one son and two daughters.

THE "O. I. C." PENDULUM WASHER.

H. F. Brammer Mfg. Co., Davenport, Ia., have put on the market the "O. I. C." pendulum washer, which is provided with a pendulum attachment which is said to greatly reduce the labor of washing the clothes, and which can be operated while standing or sitting. The work is all performed by a swinging movement of the arm, relieving all strain from the muscles of the back, and thus avoiding the backache of which so many women complain after doing a washing. In operating this machine the long rod held by the hand can be attached to the ball, which is the most convenient when sitting, or to the hook near the top of the wooden lever. The "O. I. C." washer has never failed, the manufacturers say, to give satisfaction where a pendulum washer is desired. It is strongly constructed and is guaranteed to withstand the maximum amount of wear and tear. Descriptive literature may be had for the asking. When writing for it kindly mention THE AMERICAN ARTISAN.

"AMERICAN WIRE ROPE NEWS."

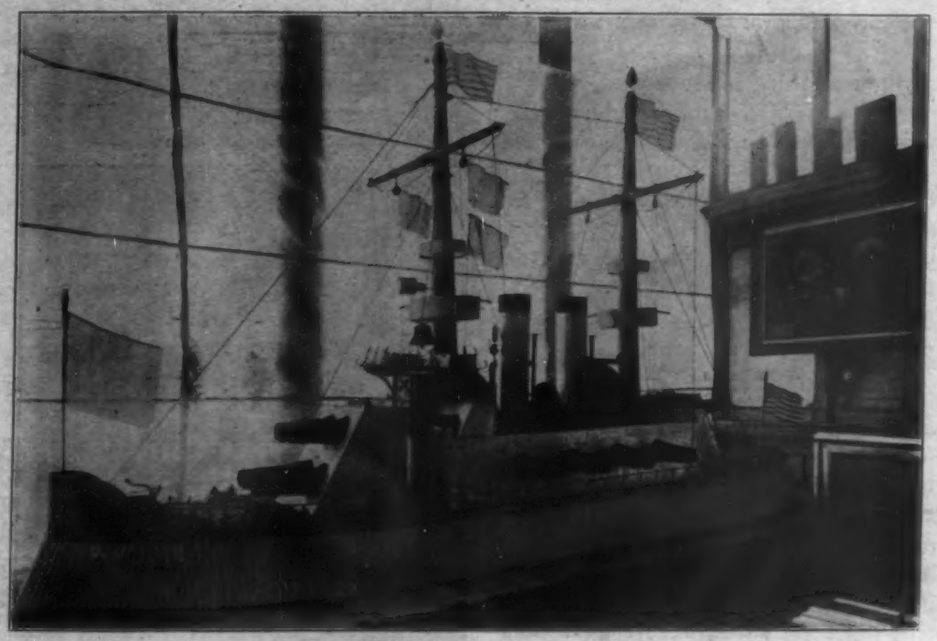
The recent issue of "American Wire Rope News," the attractive monthly publication of the American Steel & Wire Co., Chicago, is as usual full of interesting reading on the subject of wire rope. Among the articles appearing in it may be mentioned: "Elevators," by C. W. Naylor, chief engineer Marshall Field & Co., Chicago; "Logging With Wire Rope On The Pacific Coast," by W. H. Seaver, San Francisco; "Dredging Out An Empire," by Otto Kochlitzky, chief engineer Little River Drainage District, Cape Girardeau, Mo.; "Wire Rope On the Arctic Steamship 'Roosevelt,'" by D. S. Davis, New York. A number of very beautiful illustrations appear throughout the publication. Of "American" dredge rope the American Steel & Wire Company has the following to say: "In the great work of reclamation of the submerged lands of the Mississippi Valley there is no more active mechanical factor than our dredge rope. * * * * There is not the same risk of life that goes with the operation of an elevator or a mine hoist, but there is greater wear, necessitating a very close study of the requisite quality of material and also experience in manufacture, to produce a flexible, reliable and durable dredge rope." When writing the American Steel & Wire Co. kindly mention THE AMERICAN ARTISAN.

A BATTLESHIP WINDOW DISPLAY.

In THE AMERICAN ARTISAN'S hardware window display competition the judges spoke very highly of the display made by the Leadville Hardware Co., of Leadville, Colo., depicting a battleship which was built entirely of goods kept on sale in the store of the Leadville Hardware Co. A photograph of the display we reproduce herewith in reduced form.

The exterior appearance of the vessel was made to resemble as nearly as possible that of a modern double turretted warship of the American navy. The vessel was built in the center of an area of blue paper in the window laid so as to resemble an expanse of ruffled water. The ship was nearly eight feet high. The hull above the water line was made of wax candles placed on end side by side. Four hundred and eighty candles were used in this part of the work. Sheets of galvanized iron used in the construction and repair shop of the hardware store formed the sides and deck. The deck was covered with steel washers to make it resemble the riveted plates in the construction of a real fighting ship. Stovepipe joints took the place of the masts, and were mounted by neck yokes for the topmasts. Gilded plumb bobs formed the ornaments at the top of the masts from which floated the American flag. An express neck yoke was used for the yard arm on both masts. Wagon boxings with the small ends protruding from the proper places were mounted to resemble the heavy guns of the ship. The rapid fire guns on the turrets were represented by punches made of steel. Brightly polished stovepipe elbows were used for ventilators.

The flying bridge was made of brackets, and the davits of gas and steam fittings. Wooden chopping bowls were pressed into service to represent lifeboats. The smoke stacks were built of six-inch exhaust pipes, and the funnels of sausage stuffers. Hall brackets formed the anchors, and door stops were used for belaying pins. An electric light shining through a glass paper-weight took the place of a searchlight. The railing was made of wire clothes hooks for the posts, and cotton clothes lines for the guards. A pair of stove pokers served for the flag poles from which flags floated. A mine whistle and a brass bell completed the fixtures. The warship, which was 15 feet long, attracted the attention of hundreds of persons that passed by the window, according to the Leadville Hardware Co.



Honorably Mentioned by the Judges in THE AMERICAN ARTISAN'S Hardware Window Display Competition—Submitted by The Leadville Hardware Co., Leadville, Colo.

$100.00 IN GOLD FOR HARDWARE WINDOW DISPLAYS.

No subject has been given greater attention in the columns of THE AMERICAN ARTISAN than that of window dressing. Window display is one of the best, most effective and profitable methods of advertising that the retail dealer has at his command. Proof of this fact is furnished by the value placed upon this form of publicity by the great retail stores throughout the country. They realize that a well-dressed window brings them business, and accordingly they devote a great deal of time and care to this form of advertising.

In no branch of merchandising is there an opportunity for window dressing to yield greater returns than in the hardware trade, yet in this business window dressing had received less attention than in probably any other. During the past few years, however, hardware men have begun to realize the value of a well-dressed window as a business producer, and are at last waking up to the fact that hardware store windows are to a great extent accepted as a criterion to the goods that are sold inside. And there is no gainsaying this fact. A bright and attractive window is sure to attract trade, while a lifeless, poorly dressed window is quite as sure to drive it away.

THE AMERICAN ARTISAN boasts of the fact that it has done much to persuade hardware dealers that their windows are money makers when properly

trimmed. This paper has received hundreds of letters from dealers all over the country testifying to the many valuable hints and suggestions that they have received through its columns on the subject of window dressing, and THE AMERICAN ARTISAN proposes to keep alive the interest in this very important subject that it has in a large measure created.

In pursuance of its annual custom of offering inducements to hardware dealers to trim their windows, THE AMERICAN ARTISAN announces that it will give away $100.00 in cash prizes for photographs of hardware window displays with descriptions thereof. It cannot be otherwise than an advantage for people engaged in the hardware trade to enter this contest, for whether the individual wins a prize or not he will find that the time taken in preparing the display and the little expense that he may incur will be amply rewarded by the advertising that he will obtain from it and the business that it is certain to bring him.

A list of prizes to be awarded and the conditions governing the contest follow:

The Prizes.

The prizes will be awarded as follows:

First Prize, $50 in gold for the best photograph and description received of a window display of hardware.

Second Prize, $25 in gold for the photograph and description second in excellence.

Third Prize, $15 in gold for the photograph and description third in excellence.

Fourth Prize, $10 in gold for the photograph and description fourth in excellence.

The Conditions.

The conditions of the competition are as follows:

The photographs may be sent by mail or express, charges prepaid, and must reach this office not later than March 15, 1909. Address all photographs to THE AMERICAN ARTISAN Prize Competition, 355 Dearborn street, Chicago, Ill.

Each photograph and description must be signed by a fictitious name or device and the same name or device must be put upon a sealed envelope containing the real name and address of the contestant. This sealed envelope is to be enclosed with the photograph.

AWARD OF PRIZES.

A competition committee of three will be appointed, one of whom will be an expert window dresser and one an experienced hardware man. This committee will pass upon the merits of all photographs and descriptions received, without knowing the names or addresses of the senders, and will decide the winners of the contest.

THE AMERICAN ARTISAN reserves the right to publish all photographs and descriptions submitted in this competition.

THE "ENTERPRISE" MEAT AND FOOD CHOPPER.

The No. 44 "Enterprise" meat and food chopper made by the Enterprise Mfg. Co. of Pennsylvania, Philadelphia, Pa., is mounted on a column, and provided with reversible gearing which, according to its adjustment, will drive the feed screw faster or slower than the crank wheel. Fast cutting is intended for pork, which requires much less power than beef. Slow cutting is advised for beef, the extra power required being obtained by a reduction in speed. In cutting beef the Enterprise Mfg. Co. suggests that it be run through the coarse plate first (slow speed), and then through the fine plate (fast speed). Four plates are furnished with each machine, two fine (one-eighth inch holes), one medium (one-quarter inch holes), and one coarse (three-eighth inch holes). Full directions are sent with each "Enterprise" meat and food chopper shipped. The Enterprise Mfg. Co. has recently issued a catalogue of patented hardware specialties. It may be had for the asking. When writing for it kindly mention THE AMERICAN ARTISAN.

"PERFECTED MULTIPLEX" GENERATOR.

The Consolidated Gas & Electric Company, 116 Lake street, Chicago, are offering the trade the new "Perfected Multiplex" generator. This improved device for manufacturing gas from gasoline is used in connection with their "Edison Gas System," but is easily attached to any pipe and air system. They claim for the "Perfected Multiplex" generator that with an air pressure of from twelve to fifteen pounds on the gasoline storage tank, they can develop and maintain a 500-candlepower light to each mantle at a cost of about one-third cent per hour. In other words, with the "Perfected Multiplex" generator a 500-candlepower light can be had continuously for twenty-five or thirty hours on one gallon of gasoline.

"Perfected Multiplex" Generator.

The storage tank is placed outside of the building, the fuel being fed to the generator by means of a hollow wire ⅛-inch in diameter, and at no time is it necessary for there to be over a teaspoonful of gasoline in the building. In piping the gas to mantles, either galvanized iron pipe, black iron pipe, or common solder pipe is used, all pipes being furnished with threaded couplings, making them absolutely gas-tight, it is said.

This generator is inclosed in a steel box and manufactures all the gas needed from gasoline, burning 6 per cent gasoline to 94 per cent air, and this automatically mixed gas and air is piped to the different chandeliers, which are lighted with a match the same as with city coal gas. The ceiling pipes and oxidized

chandeliers are installed in the building permanently and are very attractive in appearance.

The "Edison Gas System" is adaptable for stores, halls, churches, public buildings and residence lighting. The Consolidated Gas & Electric Company offers to ship a complete "Edison Gas System," equipped with the improved "Perfected Multiplex" generator, to any reader of THE AMERICAN ARTISAN on approval, it being necessary only in ordering to give dimensions or rough plan of rooms to be lighted. When writing kindly mention THE AMERICAN ARTISAN.

PULLMAN SASH BALANCES.

The Pullman Mfg. Co., Sophia street, Rochester, N. Y., wish to inform the trade that they own all the patents on sash balances which cover every possible combination of two or more springs, and which enable them to control the manufacture of all "Tandem," "X-Raise," "Tandem X-Raise," "Corner" balances, etc. In addition, they own over thirty patents on regular sash balances, and which they claim cover the only successful balances made. The Pullman Mfg. Co. also control all patents covering steel frame and face plate, as well as balances having automatic adjustment, and also balances having, in addition thereto, enclosed tape and drum, all of which prolong the life of sash balances. The "Regular" sash balance shown in the illustration has a steel face-plate, frame and axle, the tape being of aluminum bronze, rolled edge, both tape and drum being enclosed. When writing the Pullman Mfg. Co. kindly mention THE AMERICAN ARTISAN.

Pullman "Regular" Sash Balance.

PHILADELPHIA LAWN MOWERS.

Philadelphia lawn mowers, as made by the Philadelphia Lawn Mower Co., 3101-3109 Chestnut St., Philadelphia, Pa., have long and large journals, insuring light draft and great durability. The manufacturers say that nothing but the best crucible steel is used in the knives, and all are oil-tempered. The Philadelphia lawn mower style "A" is constructed especially for fine work. It is made entirely of steel, and is unusually light in weight and draft. Style "E" is provided with removable box caps so that the cutting cylinder can be taken out without disturbing the frame. Like style "A" it has 10-inch wheels, four-blade cylinder, train of three gears, and a double ratchet, making both wheels drivers. In the "Golf" style mower the knife bar is set close to the ground to insure a close cut. It is provided with six blades, though eight blades can be furnished if desired. Style "XX" is made in large sizes, for in most cases it will be worked by two men, one to push and the other to pull with a rope, though one man can use it on ordinary lawn grass. It is especially adapted for long grass. For all-around general purposes style "K" is one of The Philadelphia Lawn Mower Co.'s best mowers. It has high wheels, five knives, cutting the grass smooth and even. Style "K" is also made with patent roller bearing on the revolving cutter journals. The roller bearings give 1¼-inch wearing surface, said to be more durable than the pin-point ball bearings. Style "C" is a medium high wheel mower constructed especially for fine work, style "S" being especially made for private lawns. The latter has a seven-inch wheel and four cutting blades. Style "T" is the same as style "S," only that it has a wrought iron cylinder with the four knives bolted to it, which is said to be a great advantage in repairing the cylinder. Style "M" is the original Philadelphia 1870 pattern, and for general purposes it is very popular, with no danger of the solid revolving cutter springing. It will cut any kind of grass. Other styles of mowers manufactured by The Philadelphia Lawn Mower Co. are known as the "All Day," "Dewey," "Drexel," "Gold Coin," and "New" mowers. All genuine Philadelphia lawn mowers have the name cast on the wheel. When writing for catalogue kindly mention THE AMERICAN ARTISAN.

"ROYAL" FOOTBALL SHOES.

The Simmons Hardware Co. of St. Louis says that in the "Royal" football shoes, which they are now putting on the market, lightness, softness and wearing qualities are combined. These shoes are made of black kangaroo calf leather, with ankle pads and oak-tanned

"Royal" Football Shoe.

sole. They are McKay sewed, and the cleats underneath are made of sole leather built in sections. The Simmons Hardware Co. says that there is a big demand for these shoes, and that dealers who carry a line of sporting goods will find them very popular with football players. When writing the Simmons Hardware Co. for prices, kindly mention THE AMERICAN ARTISAN.

"CATALOGUE-HOUSE COMPETITION AND ITS REMEDY."

"Catalogue-House Competition and Its Remedy," is the subject of a well-written booklet, the author of which is A. F. Victor, manager of the Toledo branch of the White Lily Mfg. Co., Davenport, Ia. The booklet has not been issued for advertising purposes, but was gotten out at Mr. Victor's personal expense and is intended to be a talk to the retail merchant. In it are summed up conditions of catalogue-house competition as they exist today. Mr. Victor refers to the work that has been directed against the passing of the parcels post, and points to the fact that it has been a tremendous factor in casting the limelight on an otherwise obscure national question. He does not, however, give credit to the systematic work performed by various trade journals in combating catalogue-house competition by repeated denunciations of the parcels post idea. This is, no doubt, an over-sight on the part of Mr. Victor, for he is fully aware of the valuable

work done by the trade press in waging war against cheap catalogue-house competition and the parcels post. The booklet, as already stated, is exceptionally well written and is brim full of facts and information relative to the subject with which it deals.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

Houston, Tex.—H. A. Schopmeyer and J. D. Staples have opened a hardware store under the firm name of Schopmeyer & Staples.

Chippewa Falls, Wis.—Otto Kemp has opened a hardware store and tin shop.

La Vista, Wash.—C. A. Petersen has opened a hardware store.

Duluth, Minn.—The Fleming Hardware Co. has been incorporated, with a capital stock of $30,000.

Keyser, Colo.—I. V. Lawrence has opened a hardware store.

Highmore, S. D.—Battey & Winfrey have engaged in the hardware business.

Cooperstown, Wis.—Dewane Bros. have opened a hardware store.

San Antonio, Tex.—The San Antonio Hardware Co. has opened a retail hardware department.

Logan, Utah.—The La Fount Hardware Co. has been incorporated, with a capital stock of $50,000.

Exeter, Neb.—A. Lockner & Son have engaged in the hardware business.

Guthrie, Okla.—H. E. Miller has opened a hardware store.

Antlers, Okla.—Finley Hardware Co. has been incorporated, with a capital stock of $8,000.

Edgar, Neb.—W. E. Rife has opened a hardware store.

BUSINESS CHANGES.

Malta, Ill.—The Stone & Brown Co. has purchased the hardware stocks of Harrington & Pease and W. S. Haish & Co.

Cedar Bluffs, Neb.—The Cash Hardware Co. has succeeded Adam Lockner.

Sargent, Neb.—C. L. Swanson & Co. have sold their hardware store.

Surrey, N. D.—L. D. Perring has purchased the hardware business of S. C. Eaton.

Seattle, Wash.—Fred H. Baxter has purchased the stock of the Summit Hardware Co.

Pawnee, Ill.—D. H. Henshie has sold his hardware stock to Amos Lupton and William McTaggart.

Eugene, Ore.—S. L. Long & Son have sold their hardware stock to D. D. Labbe.

Plymouth, N. H.—C. J. Gould has sold his hardware store to Albert M. Rand of Nashua.

Hennessey, Okla.—Munch & Co. have sold their hardware store to Paine Bros.

San Antonio, Tex.—Kilgore, Haydon & Payne have been succeeded in the hardware business by the Kilgore-Haydon-Holifield Co.

Goff, Kan.—H. T. Stiles has purchased the hardware business of H. G. Berridge & Co.

Dalhart, Tex.—The Rowe Hardware Co. has succeeded the Jones Hardware Co.

Shawnee, Okla.—Harry Mead Co. and Warren & Smith Hardware Co. have consolidated.

Spencer, Neb.—Munson & Pearson have sold out their hardware stock to A. T. Wenburg.

Shelby, Neb.—Schmid & From have purchased the hardware business of Henry Schmid.

Concord, Neb.—A. D. Erickson has sold out his hardware stock to the Edwards & Bradford Lumber Co.

Fowler, Colo.—The Beaty-Warner Trading Co. have been succeeded by Warner & Solseth in the hardware business.

Victoria, Tex.—W. H. Smith has purchased the hardware business of Nat Fitzgerald.

Delia, Kan.—Hopkins & Son have sold their hardware business to James & Taylor.

Cimmaron, Okla.—C. S. Brownman has purchased the business of the Paine Hardware Co.

Longton, Kan.—D. S. Bishon has purchased the hardware business of Crumrine & Cromer.

Sedalia, Mo.—E. Ralph Blair has sold his hardware business to Geo. Emo.

Waukesa, Wis.—William Kingston has purchased the hardware business of Harden Bros.

Gentry, Ark.—Friston & Bennett have sold their hardware business to W. H. Mason & Son.

Cedar, Kan.—L. E. Hartzler has purchased the Post hardware business.

Erie, Kan.—D. L. and C. L. Alderson have purchased the business of the Bishop Hardware & Furniture Co.

Steinauer, Neb.—Frank Barker has purchased the hardware business of A. F. Wenzl & Co.

Dunlap, Ill.—Roy Livingston has purchased the hardware and implement business of Geo. W. Blake.

Swanville, Minn.—A. L. Icenberger has purchased the hardware and grocery business of E. A. Flood.

Olds, Ia.—Olson & Nelson, hardware dealers, have sold their business to Geo. Bloomer.

Havana, Ill.—John Ermeling has purchased the Havighorst hardware business.

Pierson, Ill.—U. A. Brady has traded his hardware store to Mr. Springer of Decatur.

Muskegon, Mich.—Alfred J. Stulp has sold out his interest in the hardware firm of J. F. Stulp & Son.

Clay Center, Neb.—Davis & Crawford have sold their hardware stock of Peter Schmidt.

Phoenix, Ariz.—George Barnett has purchased the stock of the C. C. Manning Hardware Co.

Colfax, Ia.—C. L. Waldo has sold his hardware and furniture stock to D. R. Tripp & Sons.

MISCELLANEOUS.

Britton, Mich.—G. L. Gripton's hardware store was damaged by fire.

St. Joseph, Mo.—The store of the Balsiger Hardware Co. was damaged by fire.

Lansford, N. D.—The Garden Hardware Co. suffered a loss due to fire.

Jesup, Ia.—The hardware store of Parker & Son was damaged by fire.

Barron, Wis.—T. W. Heffner suffered a loss due to fire.

Manawa, Wis.—F. B. Meikeljohn has traded buildings and is now located in a solid concrete building.

Gillett, Wis.—The hardware store of G. Bocher was destroyed by fire.

Creston, Wash.—Goss & Vincent, hardware dealers, are erecting a new store building.

Edwall, Wash.—J. Kaulbeck is erecting a new building for his hardware and implement business.

Texarkana, Tex.—The Benjamin Hardware Co. suffered a loss due to fire.

Middletown, N. Y.—Ayers & Galloway, hardware dealers, have purchased a three-story building having a floor space of 15,000 square feet and are remodeling it for their hardware business.

Mayfield, Kan.—F. L. Lander has sold out his hardware stock.

Ionia, Kan.—Alcorn & Stevens are enlarging their store building, and will add a line of hardware and implements.

Plano, Tex.—The Philpott Hardware Co. suffered a loss due to fire.

Rising Sun, O.—James Johnson, it is reported, has filed a voluntary petition in bankruptcy.

Norfolk, Va.—The Norfolk Hardware Co. suffered a loss due to fire.

Seward, Ill.—Mr. Evans, the hardware dealer, has moved his stock to Irene, Ill.

Marilla, Mich.—Orla D. Stark is erecting a store building which he intends to use for his hardware stock.

Chautauqua, N. Y.—The hardware store of J. K. Miller was damaged by fire.

Broadway, O.—W. S. Fogle has moved his stock of hardware into his new building.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

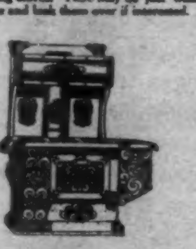
The annual fall stove sale given by Clark Bros., of Lakefield, Minn., is given special attention in the advertisement of the Lakefield firm shown herewith. In general the ad is an excellent one. Suitable type has been used, though the prices quoted on the ranges and stoves advertised should have appeared in bolder type. The arrangement is entirely satisfactory and the ad shows up to excellent advantage. The word "serviceable" is incorrectly spelled in a couple of places and the word "Stewart" as designating that make of range, is incorrectly spelled "Stewert." The word "inducements" is also mis-spelled. Clark Bros., it will be noticed, have attempted to spell certain words, such as "through" and "throughout," according to the new-fangled orthographic system, and these words accordingly appear as "thru" and "thruout." In one instance the word "thoroughly" has been distorted to "thorly," an inaccuracy which is nothing short of ridiculous. We would advise Clark Bros. to dispense with the "abbreviated" system and follow the old and authorized spellings of words. The ad, nevertheless, is very creditable and is one that might well be studied by many advertisers. It appeared in a recent issue of the *Lakefield* (Minn.) *Standard* and took up 10½ inches of space, seven columns wide.

OUR FIFTH ANNUAL Fall Stove Sale

SATURDAY OCTOBER 17 UNTIL SATURDAY NIGHT OCTOBER 31.

With the sale of every range we will make the buyer a present of a Handsome Semi-Porcelain Dinner set consisting of 42 pieces as enumerated below: Six individual Butters, Six Sauce Dishes, Six Saucers, Six Cups, 1 Oblong Vegetable Dish, 1 open Sugar Bowl, 1 Round Vegetable Dish, 1 Creamer, Six regular plates, 1 Platter, 1 Fruit plate, Six Pie Plates.

A few genuine snap bargains in second hand cooking stoves. Here may be just what you want. Come and look them over if interested.



One 9-20 Peninsular steel range, fitted with duplex grates, sectional fire backs, reservoir and high closet, good roomy baking oven, thorly repaired for $20.00

One 9-20 Garland Cast cooking stove with reservoir and shelf. Has been repaired and put in servicable condition. A snap at $10.00

One 9-20 Baxter steel range, duplex grates, 20 inch oven, reservoir and high closet, a good baker and a fine heater, just the thing for a bargain at $10.00

One 9-20 Stewert Steel range, in a very good condition. Fitted thruout with new grates and fire box. Big Reservoir and high shelf. Large baking oven. Nicely nickeled and trimmed, an ornament for any kitchen for $20.00

So successfully have we introduced our Malleable Ranges in Jackson County the past two years, we deem it unnecessary this fall to conduct a week's baking and cooking demonstration as heretofore, as everyone is thorly acquainted with the Quality and Durability of the ranges we sell.

This fall, we will expend the money usually allotted to carrying on a range exhibit in giving to our customers with the sale of every range, a present nice enough to grace the table of the finest home in the county—a present every house wife will appreciate, a present which is useful, sensible every day in the year.

HEATERS!

Well, we offer a swell line for sale this fall. And the prices are right. During this sale, we will give a coal hod, shovel, five lengths of pipe and either a stove board, or or art square with each and every heater sold at these advertised prices. No 16 Silver nickeled 1908 pattern Art Garland hard coal burner for $50.00, positively the finest creation yet devised in the hard coal heater line.

[illegible]

Model Coral Oaks from 14 inch to 18 inch in prices ranges from $10.00 to $18.00. These heaters are all now on display and we have already been enjoying a nice trade upon them.

HEATERS!

We are determined to clean up our stove line this fall, and are offering prices and enducements to make the stoves move. This is your Golden Opportunity.

A few bargain snaps in heaters, cold weather is coming, you can use them.

One 21 inch Oak Garland heater, a big stove that will throw out a lot of heat. This has been repaired with new fire bowl and grates and is now in tip top shape for $15.00

One 13 inch and one 15 Peerless Garland surface burners, two sheets high, in servicable condition. Everyone knows how these heaters work. You can buy the 13 inch for $10.00 and the 15 inch for $15.00.

One 16 inch Queen Acorn hard coal heater for $10.00 and this is a snap, as it has not a break in it and the fire bowl and grates are in good shape.

If you haven't the money to spare for a new heater and want a second hand stove which you can rely upon, has been overhauled and thorly repaired then visit our second hand stove department, second floor, and buy what you want at a big saving.

CLARK BROS.,

LAKEFIELD, - - MINNESOTA

We positively guarantee that we have not raised the price of a single range. On the other hand we have made special low prices on the ranges for this sale, and we ask your consideration to the following list. Look it over carefully.

[illegible]

Each and every range fitted with duplex grates, reservoir and high closets, modern in every respect. Guaranteed to be good stoves in every particular.

Remember with the sale of the above ranges we give the lady of the house as a present a dinner set, she cannot duplicate in any store in Lakefield for less than $7.50 which is the regular retail price of the set. Ladies you are cordially invited to call in and see these dinner sets and look over our ranges. If we cannot convince you that this is a bona fide sale on a new stock of steel ranges, and that we are giving you the most generous present in the history of our stove business then we will not hope to interest you or have your business.

Remember the date of the sale and be on hand.

* * *

R. P. Raymond, who conducts a hardware and sporting goods store at Middletown, Pa., has, as will be seen from the accompanying advertisement, incorporated in his ad. a feature which should be the means of increasing the sales of his guns and ammunition, namely, the reprinting of some of the game laws of Pennsylvania and giving other information of interest to sportsmen. All sportsmen are, of course, interested in the game laws, and it follows that after reading them in R. P. Raymond's ad., they will naturally read what is said about the advertiser's stock of guns, ammunition, etc. The ad. appeared in the *Middletown* (Pa.) *Daily Journal* of September 26, and took up 6¼ inches of space, three columns wide.

R. P. Raymond, Guns and Ammunition

Table of game birds and animals that may be killed in Pennsylvania, how many, etc.

KINDS	NUMBER BY ONE PERSON	OPEN SEASON
Bear	Unlimited	October 1 to March 1
Deer, male with horns	One each season	November 15 to December 1
Hare or Rabbit	Unlimited	October 15 to December 1
Squirrel—Gray, Black and Fox	6 of combined kinds in one day	October 1 to December 1
English, Mongolian or Chinese Pheasant	5 in 1 day, 20 in 1 week and 50 in 1 season	October 15 to December 1
Pheasant, also called Ruffed Grouse	5 in 1 day, 20 in 1 week and 50 in 1 season	October 1 to December 1
Plover	Unlimited	July 15 to December 1
Quail or Virginia Partridge	10 in 1 day, 40 in 1 week and 75 in 1 season	November only
Shore Birds	Unlimited	September 1 to January 1
Snipe, Jack or Wilson	Unlimited	September 1 to May 1
Turtle Doves and Black birds, all kinds	Unlimited	September 1 to January 1
Web footed wild fowl, Ducks, Geese, &c.	Unlimited	September 1 to April 10
Wild Turkey	1 in a day, 4 in one season	October 15 to December 1
Woodcock	10 in 1 day, 20 in 1 week and 30 in 1 season	October 1 to December 1

It is unlawful to shoot or injure Quail when bunched upon the ground.

It is lawful to trap Quail, from January 1 to Feb. 15, for the purpose of keeping them alive, but they must be liberated in the Spring.

No Deer, Ruffled Grouse, commonly called Pheasant, Quail or Virginia Partridge, killed within the Commonwealth, can be bought or sold at any time. No Ruffled Grouse, commonly called Pheasant, killed outside the Commonweath, can be sold within the Commonwealth, excepting during the open season for like birds in the Commonwealth and for thirty days thereafter. No Wild Turkey or Woodcock, killed either within or without the Commonwealth, can be bought or sold at any time. All other game can be bought or sold in season.

No game, of any kind, can be legally carried or in any manner removed out of the State.

The use of dogs in hunting deer is prohibited. Game Wardens are authorized to kill all dogs not wearing a collar with the name and address of the owner found following game, except from August 1 to January 1. Owners of dogs wearing collar thus inscribed must be notified before dogs can be killed.

No person shall use Buck Shot in hunting Deer, or use a gun propelling or emitting more than one pellet, bullet or ball at a single discharge. Only male Deer with horns, are allowed to be killed. Fawn or Doe are not allowed to be killed at any time—Penalty $100.

Deer, Wild Turkey, Pheasants, Quail or Woodcock shall not be hunted for wages or hire.

I have the largest assortment and stock of loaded shells in the county—you can get what you want here. Also hunter's clothing and ammunition of all kinds. I am selling at below cost my stock of guns as I have too many on hand. Some great bargains. Also Foot Ball and Basket Ball Supplies.

R. P. Raymond's Hardware and Sporting Goods Store

Opposite Post Office, - - Middletown, Pa.

* * *

Once get people into your store and so treat them that they will leave disposed to come again and you have taken another step toward winning trade that has gone to your competitor.

Heating and Ventilating

GEO. E. WILTSIE REPLIES TO "OLD TINNER."

To THE AMERICAN ARTISAN:

What's the use? In THE AMERICAN ARTISAN of October 10, I notice that an old friend of mine attaches the euphonious cognomen of "Old Tinner" to an article, in which he allows his mind to wander from the thirteenth chapter of Matthew clear out into Nebraska, apparently without any regrets or fear of the consequences, and after gathering to himself a volume of inspiration from his old cob-pipe, he proceeds to deal it out as a reminiscence. I am not surprised at this. I am quite familiar with the characteristics of "Old Tinner."

His mental gaze is generally focused upon the "raising block" of the good old days, long past, and his former amiable disposition has become lemonized. I judge this must be the case, for the reason that he took occasion to persist in calling attention to my wealth of "inflammatory" hair, when he well knows that I am peculiarly sensitive about that. Presumably, the economy of nature, as evidenced by his lack of hirsute embellishment, was the impelling cause.

I suppose "Old Tinner" is still the possessor of the same old peening-hammer, fashioned in accordance with his own special ideas, and made by a blacksmith predisposed to delirium tremens, whose chief function was the elimination of thumb nails, for any one unacquainted with its "hang," and who had the temerity to attempt to use it; and the same old snips, that merited a first-class throwing away along about the time that the Fenians threatened to invade Canada. That he is still with us, is conclusive proof that the good (tinners) die young, at least the most of them. I have noticed this fact to be particularly true in the case of some of the old ones.

I was gratified to learn of the good fortune of those with whom I was formerly associated, but would have appreciated hearing more concerning Charles Smith. Everybody knows Smith, and I think a straw vote (or any other vote for that matter) would favor his getting all that is coming to him, and I feel safe in stating that any one holding an opposite view, would purloin acorns from an enclosure containing a "blind pig" (not the Kansas variety, but a sure enough blind pig).

When last I heard from Smith, he was stationed about a hundred feet distant, talking "Hero" so earnestly and continuously that my first impression was that he was engaged in active competition with a phonograph for a Carnegie Medal. Subsequent investigation, however, disclosed the fact that his remarks pertained to a device made somewhere in Illinois for the consumption of coal. I always liked Smith, and if in the future my wishes can be transmitted to headquarters, and favorably acted upon, Smith will be permitted to stand a little farther away from the cupola.

But I am neglecting "Old Tinner." He states that in my first epistle to the "Midlandites" (and the last, if they have the judgment I credit them with), I "did not say much about furnace installation." This is in the nature of a criticism and, of course, hurts. If he will take the punishment to read it carefully, he will find some omissions. It was silent on the tariff; made no recommendations as to breakfast foods; did not advise as to whether or not the cat should be put out, or state how best to become effectually dispossessed of corns. He must remember that it was promulgated on a very warm evening, at an altitude of approximately 2,500 feet above sea level, and was calculated to be a "classic" in its particular field. It was disguised to work equally well on either old party platform without friction, and to last until Uncle Joe Cannon convenes sometime during the coming winter, when it could be carefully packed in excelsior and forgotten. What more did he expect? What would he think, were he given like treatment? Ha! Listen! Methinks I hear the gurgle of a generously proportioned "altitudinous spheroid" as it rounds the curve, past his "Adam's apple" on its way to winter quarters, to assist in arousing his latent imagination to the constructive point of problematically erecting a few hot-air castles.—But what's the use?

GEO. E. WILTSIE.
Des Moines, Iowa.

A NEW HOT-AIR WALL REGISTER.

Willard S. Tuttle of Tuttle & Bailey Mfg. Co., New York, Chicago, and other cities, was on October 20 granted a United States patent on a hot-air wall register. Mr. Tuttle filed the application on April 5, 1906. The number of the patent is 901,756. The register comprises a sheet metal box frame having its bottom integral with its sides and depressed in a plane wholly within the frame and provided with integral parallel

New Type of Wall Register.

bars spaced apart, forming intervening ports. The frame has grooves at the junction of its bottom with its sides. A slide valve movable upon the bottom of the box is provided with opposite lengthwise flanges guided in the adjacent grooves in the sides of the box. A second slide valve movable across and upon the first named valve is provided with out-turned flanges running along its opposite longitudinal edges. There is a grille plate across the open side of the box.

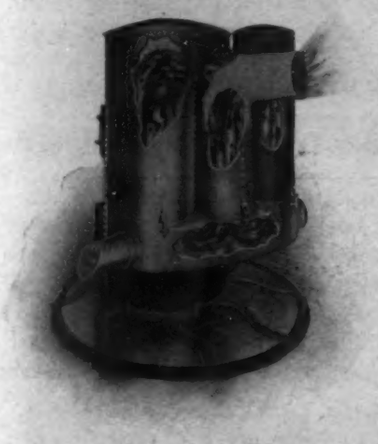
THE "SOLID COMFORT" FURNACE.

The May-Fiebeger Co., Akron, O., have recently issued a catalogue which treats solely of their new "Solid Comfort" furnace, which they have recently put on the market, and which they say has been built with a view of combining economy, durability, simplicity and ease of operation. The company says that this furnace furnishes perfectly pure warm air in the proper quantity, sends the heat to distant rooms, is easily controlled and regulated, responds quickly when the drafts are turned on, is gas tight, dust tight and smoke proof, is easily installed and is, what its name implies, a comfort to every user. The fire pot of this furnace is so constructed and shaped that when the grate is shaken it is thoroughly cleared of all ashes,

enabling the glowing coals of the furnace to do their share of the work of heating the air passed over the furnace. The feed pouch has an offset, so that a water coil can be put in through holes in the feed-door front, thus avoiding drilling the castings. The revertible chamber of the radiator is constructed so that the bottom of it slants inward and upward, thus compelling part of the air that is used for heating the house to pass through to the inner heating chamber and absorb the great amount of heat generated by the inner surfaces being brought nearer the center of the fire. The May-Fiebeger Co. says that the "Solid Comfort" furnace will perform satisfactory results under all conditions. A catalogue descriptive of this furnace may be had for the asking. When writing for it kindly mention THE AMERICAN ARTISAN.

THE "AMERICAN" FURNACE.

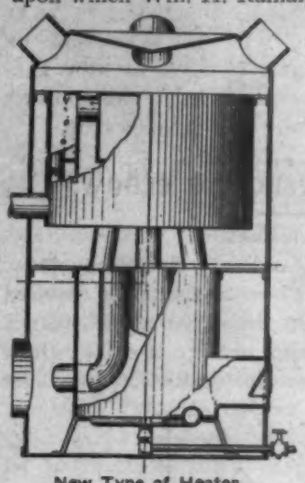
The accompanying illustration represents a rear view of the draft of the "American" furnace, manufactured by the American furnace Co., 1911-1915 Pine St., St. Louis, Mo. The American Furnace Co. says that the arrangement shown in the illustration costs more, but but effects a great saving in fuel. The "American" furnace is built on vertical lines, and according to the principle that radiant heat produces no perceptible effect upon air. The fire-pot of this furnace is made of one piece of heavy steel, which forms the entire drum except the head, and is lined with what is said to be the very best sectional fire-brick set in circular form. The grate with which this furnace is fitted is triangular in shape, hollow in the center, and is said to be very strong. Either side of the grate may be turned to the fire, which prevents it from warping. In the operation of the "American" furnace the heated products of combustion can only escape, it is said, from the combustion chamber or drum by entering the two large descending flues or radiators at the top, then down the two to the dust-box, where they connect into the ascending flue thereby giving all possible benefit of the fuel consumed. The dust-box is not connected to the drum or body of the furnace, thereby not only providing additional heating surface, but space between the drum and the flues for the air to rise and be heated. The American Furnace Co. has recently erected a new factory, equipped it with up-to-date machinery, and installed a 13-ton riveting machine. They guarantee all the joints in their heavy steel furnaces to be absolutely tight. When writing for catalogue kindly mention THE AMERICAN ARTISAN.



Rear View of Draft.

A NEW PATENTED HEATER.

The accompanying illustration represents a heater upon which Wm. H. Ramaley of W. H. Ramaley Co., Pittsburg, Pa., was on October 20 granted a United States patent, Mr. Ramaley having filed the application on January 13, 1908. This heater is provided with a casing having an air inlet and flues leading from the casing, a burner chamber and a heating chamber in the casing and flues between the chambers. Within the heating chamber for forming heating compartments therein is a partition with openings. Vertical straightway flues pass through the partition and compartments, there being a flue-strip in each of the compartments, one of the strips having openings therein. Mr. Ramaley has assigned one-quarter of the patent to Charles E. Doell, and one-quarter to Peter M. McVay of Pittsburg. The number of Mr. Ramaley's patent is 901,829, the serial number being 410,519. W. H. Ramaley Co., Pittsburg, are manufacturers of the well-known "Practical" gas furnaces.



New Type of Heater.

PARAGRAPHS.

The International Radiator Co., New York, has been incorporated with a capital stock of $100,000. The incorporators are E. T. Prince, Frank W. Dilks, and Robert J. Savedge.

The "Gilt Edge" all cast furnace is one of the newest furnaces of R. J. Schwab & Sons Co., Milwaukee, Wis. It is reputed to be an exceptionally durable, powerful and economical furnace. It has heavy wearing parts and gas-tight joints. The fire-pot is made in two pieces. The manufacturers say that this furnace has a radiator twice as large as is possessed by many other types of cast furnaces. R. J. Schwab & Sons Co. state that this furnace is a good advertisement when shown on the floor of a store, for it is said to be a ready seller wherever introduced. A catalogue may be had for the asking. When writing for it kindly mention THE AMERICAN ARTISAN.

A new directory of the American Society of Heating and Ventilating Engineers has just been issued. It contains the names of the officers of the society for 1908 and also the names of the officers back to the year 1894, when the society was organized. According to the directory, there are now 332 members. These are classified according to states and foreign countries. Following the list of members, the society's charter, constitution and by-laws are given. A list of all papers read before the society, with the authors, from the year 1895 down to the present time, is an interesting feature. The officers and board of governors of the Illinois chapter of the society, with headquarters at Chicago, are given on the last page of the directory. The Illinois chapter now has a membership of thirty.

Tinshop

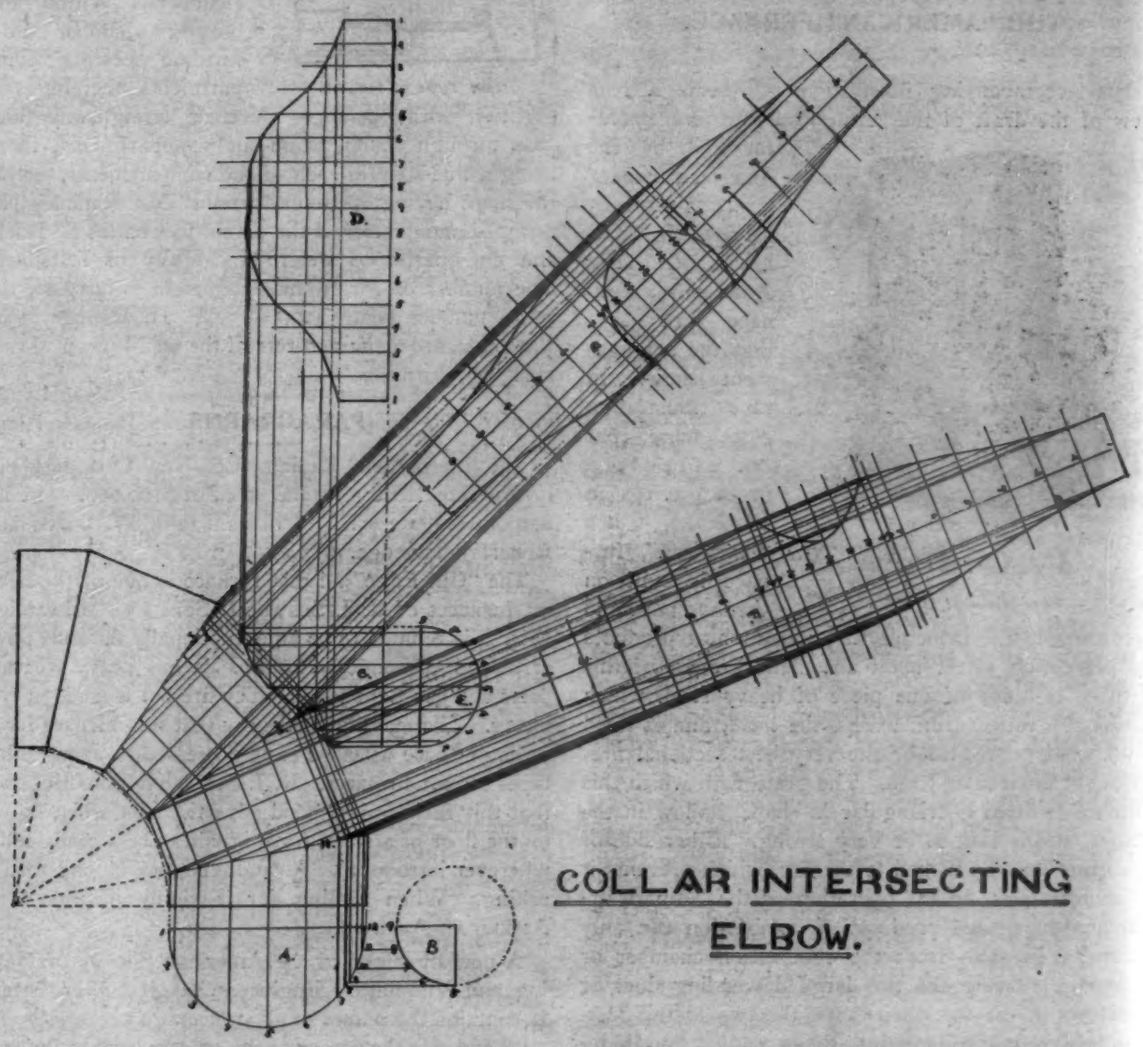
THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1908 TO NEW SUBSCRIBERS FOR THE YEAR 1909. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF 1909.

COLLAR INTERSECTING ELBOW.

BY G. L. GRAY.

Draw elevation of an ordinary five-piece elbow. Draw collar intersecting elbow at the angle required as shown by C in elevation, draw ½ plan of collar E and space into any convenient number of spaces. Draw ¼ plan B and space same as in ½ plan E; draw lines from spacings in ¼ plan intersecting half plan A. Erect lines from intersections in ½ plan A, intersecting miter lines H, I and J. Draw lines from spacings in ½ plan E intersecting lines of the corresponding numbers. Drawing lines through the intersecting points will give the miter line of collar intersecting elbow. Erect stretchout line for pattern D and place spacings from ½ plan E as 1 9 1. Draw lines from spacings at right angles to stretchout line and place T-square parallel with stretchout line and draw lines from intersecting points in elevation C to lines of corresponding numbers in stretchout D. Drawing lines through the intersecting points will give the pattern D.

Draw stretchout line for pattern F; take spacings from ½ plan A, taking each spacing separately 12 to 7 and placing them on stretchout line F, spacings 7 to 1 being equal spaces. Draw lines from spacings at right angles with stretchout line F; place T-square parallel with stretchout line F; draw lines from intersecting points on miter line H and I to lines of corresponding numbers in stretchout. Drawing lines through the intersecting points will give the pattern required. Pattern G is obtained in the same way as pattern F.



COLLAR INTERSECTING ELBOW.

SOLDERENE.

Solderene, as manufactured by the Solderene Co., Boston, Mass., is a non-corrosive composition for soldering aluminum to aluminum and aluminum to all other metals. It is especially adapted for mending leaky pans, broken handles, porcelain ware, etc., all

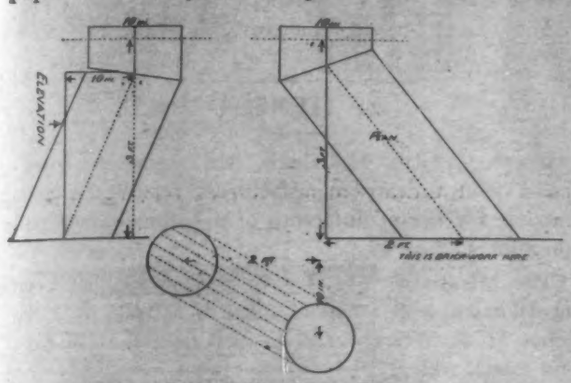
that is needed for a repair outfit being Solderene and a candle, according to the Solderene Co. It is said to be a great seller wherever introduced, and the manufacturers positively assert that for soldering aluminum

it cannot be excelled. When writing for literature and prices kindly mention THE AMERICAN ARTISAN.

PATTERNS WANTED FOR THESE.

To THE AMERICAN ARTISAN:

I would like to be informed through your valuable paper how to lay out the patterns for the sketches



Patterns Wanted for These.

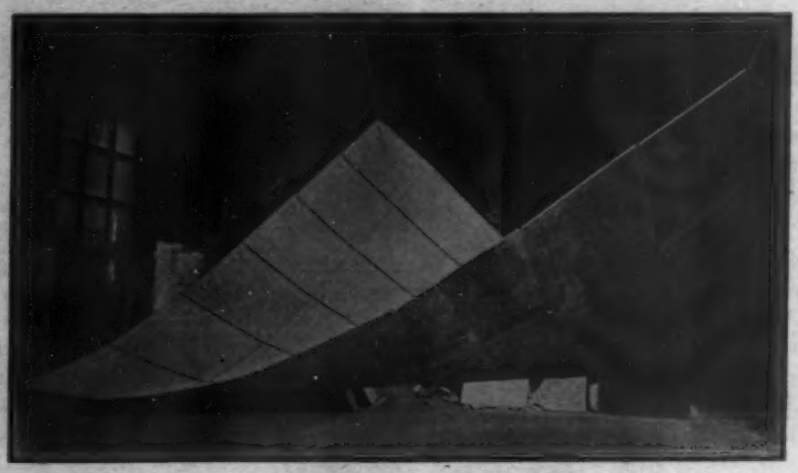
shown herewith. I trust that some of my brother "tinks" will be able to help me out in this matter.

G. F. WAGNER.

333 Terrace Ave., Marinette, Wis., Oct. 21, 1908.

KEIGHLEY LOCK-JOINT METAL CEILING.

In the accompanying illustration is shown a 12x12 foot section of Keighley lock-joint metal ceiling, manufactured by the S. Keighley Metal Ceiling & Mfg. Co., Pittsburg, Pa., suspended from two corners held together by the seams without any other fastening. This is an example of how great a test Keighley lock-joint ceilings will stand without injury, and the manufacturers say that there are few other metal ceilings made which will stand such a test. The S. Keighley Metal Ceiling & Mfg. Co. requests that all those who are interested in metal ceilings should send them plans or sketches with measurements, and they will prepare a special water-color drawing, showing the ceiling arranged to suit the room, at the same time naming a net price on the material delivered at its destination. The company will be pleased to forward their new catalogue of designs upon request. When writing for it kindly mention THE AMERICAN ARTISAN.



Section of Ceiling Suspended from Two Corners.

CATALOGUE OF GEO. W. DIENER MFG. CO.

George W. Diener Mfg. Co., 77-83 West Lake Street, Chicago, manufacturers of tinners' soldering furnaces, have just issued Catalogue No. 7 of "Torrid" gasoline appliances, hardware specialties, sheet metal specialties and forged tools. The catalogue comprises 52 pages, and in it are very fully described and illustrated the complete line of goods made by the Geo. W. Diener Mfg. Co. The company's well-known "Torrid" square furnace is the first article given attention in the book. This furnace is especially constructed for sheet metal workers' use. It is equipped with the company's cast "horse-shoe" burner, burning from each side toward the center, giving the benefit of all of a torrid blue flame in heating contact with one or two coppers, a point of merit which all mechanics who use but two coppers will appreciate. The tank of this furnace is of drawn (not pieced) No. 18 gauge steel, galvanized and rectangular in shape, avoiding danger of upsetting on roofwork, etc. It is tested at 30 pounds air pressure. It is noiseless, odorless and smokeless in operation.

The "Torrid" swing burner furnace is designed for heating soldering copper and melting pot or for torch use. It is fitted with the Geo. W. Diener Mfg. Co.'s "Torrid" blast burner, which can be swung to any desired angle, giving a blue flame directly on the part to be heated. The tank of the "Torrid" plumbers' pot is of heavy galvanized iron with cast galvanized bottom ring and top. The small castings are made of malleable iron to insure strength and lightness. Among other articles described in the catalogue may be mentioned the "Torrid" blast torch; the "Torrid" flame torch, flame combination torch, automobile torch, painters' furnace, alcohol blow pipe and soldering torch, blast pocket torch, blast brazer, wall torch, gas soldering furnace; glue heaters; "Peerless" and "Competition" ash and garbage cans; ash and garbage pails; oily waste and benzine pans; salamanders; hand fire pumps; adjustable elbows; rural mailboxes; butter churns; ash can handles; cold chisels; punches; drills; bricklayers' hammers; gouges; calking tools; tinners' snips, and various types of pliers, etc. When writing Geo. W. Diener Mfg. Co. for catalogue No. 7 kindly mention THE AMERICAN ARTISAN.

ACCURATE MEASURES.

Although accurate measures of volume have always been as necessary as accurate weights and scales, it is only recently, since legal enactments by several states have called attention to the subject, that merchants and manufacturers have recognized the need of such appliances. If wrong they are a constant source of worry and expense. F. Cortez Wilson & Co., 245 Lake street, Chicago, have given close attention to the making of exact liquid measures for years, and so have earned an enviable reputation. Their sheet metal works in Chicago was established in 1869. In addition to a full line of commercial measures made of IC, IX and IXXXX tin, also galvanized iron and copper, sizes ¼-pint to 5 gallons which are always carried in stock, F. Cortez Wilson & Co. make a large variety of measures for special uses, such as tank wagon measures of many styles; testing measures for sealers, glass manufacturers, etc.; special measures in groups for chemists, compounders and manufacturers; metric measures for schools; imperial measures for exporters, and other special applications. All their measures are retested and proved by comparison with measures that have been tested and corrected to the finest fraction for them by the Bureau of Standards of the United States Department of Commerce and Labor. It goes without saying that ordinary shop conditions make impossible the production of such work. Measures are only one of their lines, and grow out of their prominence as manufacturers of tanks and cans. In outing goods also their product is recognized as standard. Shell boxes, tackle boxes, heaters and the "Kamp Kook's Kit" find a place in every well-assorted stock of sporting goods. Their catalogue sections relating to the several lines are interesting and instructive. When writing F. Cortez Wilson & Co. kindly mention THE AMERICAN ARTISAN.

Five-Gallon Liquid Measure.

NOTES AND QUERIES.

TIN FOIL.

From J. F. Leslie, 416 West Main Street, Madison, Wisconsin.

Kindly give me the names and addresses of some manufacturers of tin foil.

Ans.—The John J. Crook Co., 149 Fulton St., Chicago; Johnston Tin Foil & Metal Co., St. Louis, Mo.; L. F. Grammes & Sons, Allentown, Pa.

"STAR" SAFETY RAZORS.

From Sterling Hardware Co., Sterling, Illinois.

Who makes the "Star" safety razor?

Ans.—Kampfe Bros., 8 Reade St.. New York.

LIQUID GLASS.

From Chapman-Baertich Co., Linton, Indiana.

Where can we get liquid glass for painting the inside of a cistern so as to keep the taste of the cement out of the water?

Ans.—The William Connors Paint Mfg. Co., Troy, N. Y.; T. J. Peterson Co., 22 Fifth avenue, Chicago.

SHEET LEAD.

From J. F. Leslie, 416 West Main Street, Madison, Wisconsin.

Kindly refer me to some manufacturers of sheet lead.

Ans.—E. W. Blatchford & Co., 70 N. Clinton St., Chicago; Detroit Lead Pipe & Sheet Lead Works, Detroit, Mich.; National Lead Co., 1510 State St., Chicago; Raymond Lead Co., 59 W. Lake St., Chicago.

"GEM" SAFETY RAZORS.

From Sterling Hardware Co., Sterling, Illinois.

Who makes the "Gem" safety razor?

Ans.—Gem Cutlery Company, 78 Reade St., New York.

ITEMS.

Joseph C. Glass of Lehigh, Ala., wishes to correspond with tinware manufacturers relative to contracting for the manufacture of a patent dinner pail for miners.

The Metalware Mfg. Co. of Dayton, O., has been incorporated with a capital stock of $10,000 by J. R. Jones, H. B. Myers, Ralph E. DeWeese, J. B. Moyers and Lee Markley.

Venderbush & Looman of Detroit, Mich., will in future be known as The Venderbush & Looman Co., a corporation with a capital stock of $10,000. A roofing and sheet metal business will be continued.

Fire on October 17 did $50,000 damage to the lath department of the Youngstown Iron & Steel Roofing Co., Youngstown, O. No damage, however, occurred to the sheet plant of the company. The burned portion of the lath department will be rebuilt at once.

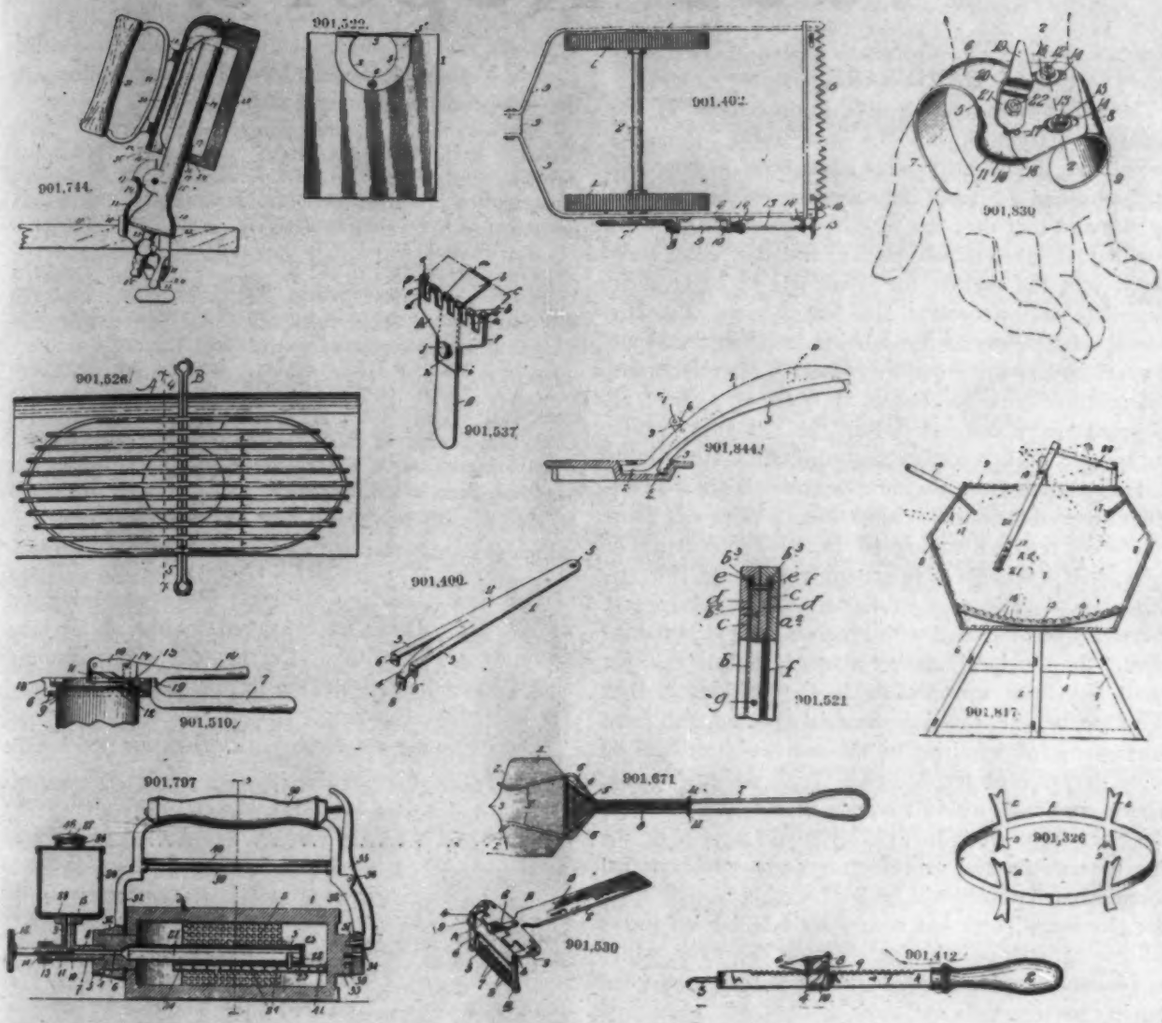
At the September meeting of the Master Sheet Metal Workers' Association of Wilmington, Del., the following officers were elected: President, Chas. H. Blaine; vice-president, W. A. Gallaher; secretary, S. E. Harpel; treasurer, Geo. L. Stradley, Jr. The board of trustees of the association comprises W. H. Alexander, E. R. Davis and Z. F. Rudolph.

Gerock Bros. Mfg. Co., 1227 Manchester Ave., St. Louis, report a constantly increasing demand for their sheet metal ornaments and statuary. They have recently issued a catalogue which they request the trade to send for. Gerock Bros. Mfg. Co. make a specialty of detail work. When writing for catalogue kindly mention THE AMERICAN ARTISAN.

Follansbee Brothers Co., Pittsburg, Pa., have opened an office at 326 Reaper Block, Chicago, which is an addition to their office and warehouse at Milwaukee, Wis., where a large stock of roofing and bright plates, solder, etc., are carried and from which branch two salesmen are now traveling. Both offices are in charge of Austin Clawson, whose residence is in Chicago.

Bertsch & Co., Cambridge City, Ind., have recently issued Catalogue "F," in which a very complete description is given of their treadle punch, designed especially for sheet iron shops. It is built with either foot treadle or overhead hand lever, or both combined, as desired. Bertsch & Co. say that their treadle punch is in great demand by sheet metal workers and that it is giving unlimited satisfaction. Bertsch & Co. build a complete line of shears, punches and forming rolls of all sizes for hand or power. When writing for catalogue "F" kindly mention THE AMERICAN ARTISAN.

NEW PATENTS.



901,326—Skillet Support. Hannah C. Ebert, Los Angeles, Cal. Filed June 13, 1907. Serial No. 378,840.

901,400—Pan Handle. Augustus Vincent, Brooklyn, N.Y. Filed Dec. 24, 1907. Serial No. 407,977.

901,402—Lawn Mower. Joseph Watson, Obion, Tenn. Filed Feb. 4, 1908. Serial No. 414,227.

901,412—Can Opener. Sherman T. Allen, Detroit, Mich. Filed Dec. 23, 1907. Serial No. 407,622.

901,510—Can Opener. William H. Winfield, Richmond Hill, and William Senn, New York, N. Y. Filed Dec. 31, 1907. Serial No. 408,780.

901,521— Window Screen. Edward Carney, High Falls, N. Y. Filed Dec. 6, 1907. Serial No. 405,352.

901,522—Scissors Sharpener. John B. Carroll, Chicago, Ill. Filed Aug. 2, 1907. Serial No. 386,743.

901,526—Gutter Strainer. Henry Dixon, Dayton, Ohio. Filed Jan. 29, 1908. Serial No. 413,164.

901,530—Safety Razor. Martin Flynn, Paterson, N. J. Filed Jan. 2, 1908. Serial No. 409,027.

901,537—Razor. Alfred Koscherak, New York, N. Y. Filed March 28, 1908. Serial No. 423,854.

901,671—Bread, Cake and Pie Lifter. Fred A. Bennett and Sarah L. Bennett, Moline, Ill. Filed July 30, 1907. Serial No. 386,250.

901,744—Sad-iron Heater. Halsey W. Russell, Manchester, N. H., assignor to Tubeless Iron Company, Manchester, N. H., a corporation of Maine. Filed June 19, 1908. Serial No. 439,339.

901,797—Sad-iron Heater. George W. Fallin, Montgomery, Ala., assignor to Mathew M. Freed, Montgomery, Ala. Filed May 13, 1908. Serial No. 432,680.

901,817—Washing Machine. Doc McMannama, Villisca, Iowa. Filed Nov. 25, 1907. Serial No. 403,801.

901,830—Husker. Joseph A. Ramsey, Beatrice, Neb. Filed Sept. 30, 1907. Serial No. 395,265.

901,844—Stove-lid Lifter. Alexander Smith, Newport, R. I. Filed June 5, 1908. Serial No. 436,933.

There has been invented recently an economical and easily utilized appliance for use in connection with small ranges or gas stoves, and especially useful for single burner gas stoves, for using the heat of the burner for cooking purposes and at the same time heating irons. With this arrangement the housekeeper is enabled to continue the use of the burner for simultaneously heating the irons and cooking. It comprises an inverted pan-shaped body adapted to be set in the stove top or over the gas burner. On one side is an opening for the insertion and withdrawal of the iron and a perforated top that forms a rest and heating base for the cooking utensil. Covering the opening is a hinged door, to prevent the heat from escaping. The irons, being encased, are heated quickly, since the heat is concentrated and maintained within the holder. To withdraw the irons conveniently, a bow-shaped wire handle is employed.

Trade Report.

HARDWARE.

There has been considerable improvement in the hardware market during the past week. Retailers throughout the country who have been putting off purchases find so much improvement in the consuming demand that they are wholly unable to cope with it with their present low stocks, and they have been forced into the market for small lots to cover their immediate requirements. This has resulted in a fair volume of business to the jobbing trade in the shape of small orders for prompt shipment. Manufacturers still continue to urge jobbers to stock up against an expected heavy demand during the last two months of the year, and so obviate any congestion at the mills that may result from the simultaneous placing of rush orders immediately after the election. Wire nail manufacturers report a falling off in the shipments. On contract business there is generally a request for anticipation of deliveries, while new business is almost invariably accompanied with requests for prompt shipment. In the local market there is a fair call for small lots from store, while in the markets farther West a much improved demand is reported, and from the volume of inquiries in the market there will be some large contract business forthcoming shortly. There continues a fair advance in cut nails. While the gain from week to week is small, it is none the less perceptible, and manufacturers are confident that some large business will be forthcoming shortly after the election. There has been a little falling off in the volume of barb wire business during the week, which has in no wise discouraged manufacturers, as the fall buying movement is not quite due yet. In plain wire there continues a heavy call from fence manufacturers and a good business is reported coming into the mills. A general request for prompt shipment is noted, and prices are generally well maintained.

The base price of wire nails at the mill is $1.95 per keg. The jobbing price is $2 at the mill for full carloads, $2.10 at the mill for less than carloads and $2.40 out of store. The base price of cut nails at the mill is $1.80 per keg. The jobbing price is $1.85 for full carloads at the mill, $1.95 for less than carloads at the mill and $2.25 out of store.

In the Chicago market wire nails are quoted as follows: Wire nails, jobbers' carload lots, $1.95; retailers' carload lots, $2; painted barb wire, jobbers' carload lots, $2.10; retailers' carload lots, $2.15, with 30 cents for galvanizing; plain wire to jobbers in carloads, $1.80, and to retailers in carloads, $1.85.

TIN PLATE.

New business in the tin plate industry continues of small proportions. The big seasonable demand is over but mills are busy and will be busy for some time to come on old contracts. Consumers are sending in specifications more freely. The American Sheet & Tin Plate Co. is operating about 50 per cent of its capacity. Prices are $3.89 for 100-pound coke plates f. o. b. New York, and $3.70 at Pittsburg mills, with the independents quoting $3.65.

Am. coke tins, I. C., from store, New York:	
Bessemer steel, 107 lbs., 14x20	$4.35@4.40
Bessemer steel, 100 lbs., 14x20	4.20@4.25
Bessemer steel, 95 lbs., 14x20	4.10@4.15
Bessemer steel, 90 lbs., 14x20	4.00@4.05
Am. charcoal terne, 8-lb. coating:	
Worcester grades, 14x20, 107 lbs	4.30@4.35
Worcester grades, 14x20, 100 lbs	4.15@4.20
Worcester grades, 20x28, 200 lbs	8.05@8.10
For prompt shipment, f. o. b. mill:	
Coke, tins, 14x20, I. C	3.85@3.90
Coke, tins, 14x20, 100 lbs	3.70@3.75
Coke, tins, 14x20, 95 lbs	3.65@3.70
Coke, tins, 14x20, 90 lbs	3.60@3.65
Charcoal, terne, 20x28, I. C	7.30@7.35
Charcoal, terne, 20x28, 200 lbs	7.00@7.05

Usual difference for odd sizes and weights.

SHEETS.

The sheet trade is declining. Prices are being cut *ad libitum*. These have sagged in almost all sales from $1 to $2 a ton. Corrugated and galvanized sheets have the call but the buying is spasmodic and for immediate consumption.

The following are New York prices for 500-bundle lots and over, f. o. b. mill:

	Galvanized. Net.
No. 30	$4.05
No. 29	3.80
No. 28	3.65
No. 27	3.35
Nos. 25 and 26	3.15
Nos. 22 and 24	2.95

COPPER.

There is a firmer market for ingot copper, and higher prices are quoted by the leading producers. The minimum price on Lake copper is now 14 cents and predictions are being freely made that 15 cents will be quoted in the near future. While a good deal will depend upon the attitude of consuming interests, there is no doubt that the feeling is better in both producing and consuming circles. It is claimed that the actual movement of copper during the past few days has been at the rate of at least 10,000,000 pounds a day, and that more copper has been sold than during any similar period since the beginning of the year. It is reported that several large interests are figuring on large blocks of copper for delivery early next year, and that some of the large electrical companies have not only been looking out for a supply for next year, but have also supplied their needs for the balance of this year. The London copper market shows a very good advance for the week, amounting to £1 16s 3d on spot and £1 17s 6d on futures. Sheet copper is firm and unchanged, the base price being 18 cents. There is no change in yellow metal, quotations being 17 cents for dimensions, 15 cents for sheathing and sheathing nails, 16 cents for slating nails and 17 cents for keel and stem metal. The base price on copper wire is unchanged at 15¼ cents.

SPELTER.

Spelter is slightly firmer, St. Louis quoting $4.62½, with the New York quotation firm at $4.80@4.85. The Boston jobbing price is steady and unchanged at 5@5⅛ cents. London quotes spelter at £19 12s 6d.

PIG IRON.

The market for pig iron shows a very decided change for the better, with more inquiries than have been noted for many weeks. Not only is iron needed for prompt shipment, but there is an excellent inquiry for iron for delivery in the first half of 1909, and some buyers are asking for prices on deliveries running through the year. In every way there is a decidedly better feeling, and iron men are very much encouraged over the present outlook. A contract involving $3,600,000 has just been closed between the Pittsburg Steel Co. of Pittsburg and M. A. Hanna & Co. of Cleveland for 200,000 tons of pig iron during the next five years. The contract calls for 6,000 tons of pig iron every month for five years, beginning January 1 next. The price is subject to a sliding scale and is unique in the iron business. The Hanna Co. agreed to furnish the iron at a profit of from 7 to 12 per cent over actual cost. What the actual cost will be cannot now be computed. The price, based on the actual cost of production, will be fixed at regular intervals. When negotiations were first undertaken the propostion of a sliding scale was looked at askance by the iron firms seeking the contract, but it is now believed to be a good contract. The present market price of pig iron is $14, several of the big Pittsburg concerns having contracted for large orders at that figure.

CHICAGO MARKET.

Lake Superior charcoal	$19.50
Northern foundry No. 1	17.00@17.50
Northern foundry No. 2	16.50@17.00
Northern foundry No. 3	16.00@16.50
Southern foundry No. 1	17.35@17.85
Southern foundry No. 2	16.85@17.35
Southern foundry No. 3	16.35@16.85
Southern foundry No. 4	15.85@16.35
Southern No. 1, soft	17.35@17.85
Southern No. 2, soft	16.85@17.35
Southern Gray forge	15.60@16.10
Southern mottled	15.35@15.60

PITTSBURG MARKET.

No. 1 foundry	15.60@16.10
No. 2 foundry	15.25@15.50
Gray forge	14.25@14.50
Bessemer	15.40@15.65
Basic	14.80@14.90

BIRMINGHAM MARKET.

No. 1 foundry	13.00@13.50
No. 1 soft	13.00@13.25
No. 2 foundry	12.50@12.75
No. 2 soft	12.50@12.75
Gray forge	11.00@11.50

Rogers, Brown & Co., Cincinnati, will say in their weekly report: "A satisfactory run of small orders for prompt shipment and larger inquiries with an earnest tone have characterized the last week of the 'waiting period' before the doings of next Tuesday. The volume of sales made have evidenced feeling of confidence on the part of customers who have heretofore been reluctant as to their requirements during the balance of this year and early portion of next.

"The business recently placed has fixed some furnaces so that they are practically out of the market for the balance of this year, and, while they are still somewhat undecided regarding figures for next year, are stronger in their tone.

"At some points in the East pig iron sellers are firmer in their views, with an advancing tendency. A good tonnage is under consideration and will probably be closed in the next few days.

"The demand for steel making irons continues good and movement of iron on contracts is keeping up splendidly. Report of the Steel Corporation for the third quarter is better than was anticipated and, considering the period which it covers, rather unusual.

"Railroad buying has been better, as evidenced by increased buying of pig iron by some malleable concerns, car shops and locomotive builders. Car wheel makers report their business improving.

"Structural steel orders placed make it evident that there will be a larger proportion of manufacturing capacity active by the first of November than was anticipated could be at the rate things were going two weeks ago.

"There is nothing like a rush in the pig iron business as yet, but a distinctly visible gain in activity that is very satisfactory.

"Coke is active and prompt shipments are progressing nicely. Production is improving. Many operations are still greatly handicapped on account of drought and are spending large sums of money in hauling water and keeping their plants in operation to take care of the pressure brought upon them by customers."

SEEDS.

The Leonard Seed Co., Chicago, say in their weekly report:

"The reports of crops from different growing sections of the United States and the old country are in, and show shortages in small seed crops well in excess of those of 1907. In many sections both dry weather and blight have done their worst, and the merchant who expects to buy low-priced seeds this year will have to go to some unreliable jobber who has a bunch of old and doubtful seed on his hands, which he is always glad to unload at a low figure. Seeds are not all cleaned up yet, and complete reports later may, to a small extent, change present ideas of shortages and valuations. However, seed stocks in general were so well cleaned out last year that prices are very liable to work up, rather than down.

"Asparagus seed seems to be plentiful. Beets are the shortest crop in years, such varieties as Egyptian, Detroit Dark Red and Crimson Globe, about 25 per cent of a crop. Early Blood Turnip, Long Smooth Blood, about 50 per cent of a crop. Carrots average about half a crop. Cucumber seed is extremely short, many sections reporting almost a complete failure, the Pickle and Long Green varieties being the shortest. Cabbage seed about two-thirds of a crop. Sweet corn is a very short crop, and prices will average nearly as high as last year, the largest demand and shortages being among the canners' varieties, Stowell's Evergreen, Country Gentleman, etc. Lettuce crops are fairly short on the early forcing varieties. The latest reports on the head varieties indicate an average crop.

"Musk melon—such varieties as Nettled Gem and Rocky Ford, indicate a fair crop, but Osage, Paul Rose, Emerald Gem, Tip Top, Hackensacks and other leading varieties, are impossible to obtain in any but small quantities, and good stocks of these are well worth $1.00 per pound and upwards. Watermelons seem to have done fairly well, and seed is, therefore, plentiful, except on Kleckley Sweets. Onion seed will continue to be rather high in price; shortages are especially acute on the flat varieties, such as Wethersfield and Portugal. Red and Yellow Globes are somewhat less than average crop, and the White Globes are the shortest of all. Radish seed crops have turned out better than early reports indicated; there seem to be some shortages on the early forcing varieties. Both Spinach and Turnip seed crops seem to have done well. Sweet Peas are about half a crop. Nasturtiums have turned out fairly well. Everything indicates that the seed merchant who places his order early in the season has done well.

There is an unprecedented demand for onion sets in the local market at the present time. Chicago is the central market for this bulb and more of it is grown around Chicago than in any other part of the United States. Onion sets are shipped from Chicago to every part of the world. The brisk demand is caused by the crop shortage, the result of a dry season.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 85
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 5
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$17 00@$17 50
North'n Fdy., No. 2	16 50@ 17 00
North'n Fdy., No. 3	16 00@ 16 50
Southern Fdy., No. 1	17 35@ 17 85
Southern Fdy, No. 2	16 85@ 17 35
Southern Fdy., No. 3	16 35@ 16 85
Southern Fdy., No. 4	15 85@ 16 35
Southern No. 1 Soft	17 35@ 17 85
Southern No. 2 Soft	16 85@ 17 35
Southern Gray Forge	15 60@ 16 10
Southern Mottled	15 35@ 15 60
Lake Sup. Charcoal	19 50
Southern Silveries, 4% Silicon	17 85@ 18 35
Southern Silveries, 5% Silicon	18 35@ 18 85
Southern Silveries, 6% Silicon	18 85@ 19 35
Jackson Co. Silveries, 6 per cent	19 90
Jackson Co. Silveries, 8 per cent	20 40@ 20 90
Jackson Co. Silveries, 10 per cent	21 90
Malleable Bessemer	17 00@ 17 50
Standard Bessemer	17 65@ 18 15
Alabama Basic	16 85@ 17 35

BLACK STEEL SHEETS.

No. 12	per 100 lbs.	$2 20@$2 30
No. 14	per 100 lbs.	2 25@ 2 35
No. 16	per 100 lbs.	2 35@ 2 45
Nos. 18-20	per 100 lbs.	2 60@ 2 65
Nos. 22-24	per 100 lbs.	2 65@ 2 70
No. 26	per 100 lbs.	2 70@ 2 75
No 27	per 100 lbs.	2 75@ 2 80
No 28	per 100 lbs.	2 85@ 2 95

GALVANIZED

No. 10	per 100 lbs.	$3 05@$3 10
Nos. 12-14	per 100 lbs.	3 05@ 3 10
No. 16	per 100 lbs.	3 05@ 3 10
Nos. 18-20	per 100 lbs.	3 15@ 3 25
Nos. 22-24	per 100 lbs.	3 30@ 3 35
No. 26	per 100 lbs.	3 50@ 3 55
No. 27	per 100 lbs.	3 70@ 3 75
No. 28	per 100 lbs.	3 90@ 4 00

POLISHED SHEET STEEL.

No. 24	per 100 lbs	$4 90
No. 26	per 100 lbs.	5 00
No. 27	per 100 lbs.	5 10
No. 28	per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth, No. 20		$3 05
" "	No. 22-24	3 10
" "	No. 25-26	3 15
" "	No. 27	3 20
" "	No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, "A" $10.20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel 8½c

SOLDER.

XXX Guaranteed ½ & ½	per lb. 18 c
Commercial ½ & ½	per lb. 17½c
No. 1 Plumbers	15½c

SHEET ZINC.

500 lb. Casks	case, per cwt. $7 15
300 lb. Casks	per cwt. 7 15
Sheets	per cwt. 7 15

COPPER.

Copper sheet, 100 lbs. over, base ... 17c

TIN PIGS AND BARS.

Banca, pigs, per lb	29 c
Straights, pigs, per lb	29 c
Straights in bars, per lb	33 c

LEAD.

American Pig	4 c
Bar	4 c
National (White) brands (in less than 100 lb lots), per lb	8½c

Sheet.

Full coils	per 100 lbs. $9 00
Cut coils	per 100 lbs. 9 50

HARDWARE.

ADZES.

Carpenters'.

Plumbs	40%

Coopers'.

Barton's	20%
White's	15%

Railroad

Plumbs	40%

Ship.

Plumbs	40%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L Waterproof, 1-10s	40c
G D	35c
Musket	60c

Shells; Loaded—

Loaded with Black Powder	40%
Loaded with Smokeless Powder, medium grade	40 & 5%
Loaded with Smokeless Powder, high grade	40 & 10 & 10%

Union Metallic Cartridge Co.:

New Club, Black Powders	40%
Nitro Club, Smokeless Powders,	40 & 5%
Arrow, Smokeless Powders	40 & 10 & 10%

Winchester:

Smokeless Repeater Grade	40 & 5%
Smokeless Leader Grade	40&10&10%
Black Powder	40%

Gun Wads—per 1,000.

Winchester Gun Wads	15%

Powder.		Each.
DuPont's Sporting, kegs		$ 50
" "	½ kegs	2 50
" "	¼ kegs	1 40
Dupont's Sm'k'less	50-lb. drum	22 45
" "	25-lb. kegs	11 30
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
"	1-lb. cans	15

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb. bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25-lb. bags, "	2 20

ANCHORS

Expansion Screw Anchors 10%

ANVILS

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 51 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper 33⅓%

AUGURS.

Boring Machine	70%
Irwin's	40&10%
Carpenter's Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearns, No. 3	36 00
Post Hole.	
Digwell, 8-inch, per doz.	12 50
Iwan's Post Hole and Well	40%
Vaughan's, 4 to 9-in., per doz.	6 25
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or wi'out screw	40-12½%
Snell's " " "	40-5%

AWLS.

Brad.		
No. 3 Handled	per doz.	$0 40
No. 1050 Handled	"	80
Shouldered, assorted, 1 to 4	per gro.	$1 20
Patent asst'd, 1 to 4	"	85
Harness.		
Common	"	95
Patent	"	90
Peg.		
Shouldered	"	1 20
Patent	"	60
Scratch.		
No 1 handled	"	4 80
No. 15, socket handled	per doz.	1 25
No. 7 Stanley		1 80
Sewing.		
Common	per gro.	90
Patent	"	90

AXES.

Boy's Handled.		
Lippincott, 3 lb	per doz.	$6 00
Falls City	"	6 00
Broad.		
Plumbs, West, Pat		33⅓%
" Can. Pat		40%
" Firemen's (handled)	per doz	$1 75
Plumbs, Miners' (handled)	"	6 75
Single Bitted (handled)		
Gladiator . 3 to 4 lbs , per doz		$11 00
Flint Edge " "	"	9 25
Standard .. " "	"	9 25
Elec Chopper, Forest Clipper		10 50
Perfect Premier "	"	10 00
Crown " "	"	7 00
Single Bitted (without handles)		
Gladiator . . 3 to 4 lbs. per doz.		$8 50
Flint Edge. "	"	7 00
Standard . . . "	"	7 00
Electric Chopper"	"	8 25
Perfect . . . . "	"	7 75
Crown . . . . "	"	6 25
Double Bitted (without handles).		
Gladiator . . . 3 to 4 lbs. per doz.		11 50
Flint Edge. "	"	9 75
Perfect . . . . "	"	11 00

The above prices on axes of 3 to 4 lbs. are the base prices.

3½ to 4½ lbs: advance 25c
4 to 4½ lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Prary's	40%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point . . per cwt. $3 75

BASKETS.

Clothes.		
Small Willow	per doz.	$7 00
Medium "	"	8 75
Large "	"	10 50

Galvanized Iron.	½ bu.	1 bu.	1½ bu.
Per doz	$4 75	6 50	8 00

BEATERS.

Carpet.	per doz.
No. 10 Coppered Spring Wire	$0 90
No. 12 Spring Wire	1 10
No. 10 Preston	1 10

Egg.	Per doz.
No. 50 Imp. Dover	$0 75
No. 102 " " tinned	85
No. 150 " " hotel	1 40
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 50

BELLOWS.

Blacksmiths'	65%
Hand.	
8-inch, per doz.	$8 50
10-inch "	10 50
Moulders'.	
12-inch "	12 50

BELLS.

Call.	
3-inch Nickeled Rotary Bell, Bronzed base, per doz.	$5 00
Cow.	
High Grade	60%
Kentucky	65&10%
Door.	Per doz.
New Departure Automatic	$6 00
Rotary.	
3 -in. Old Copper Bell	4 00
3 -in. Old Copper Bell, fancy	6 00
3 -in. Nickeled Steel Bell	4 50
3½-in. Nickeled Steel Bell	5 00
Hand.	
Hand Bells, polished	50&5%
White Metal	40%
Nickel Plated	30%
Swiss	40&33⅓%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	50%
Farm, lbs	40 50 75 100
Each	$1.25 1.60 2.35 2.85

BEVELS, TEE

Stanley's, rosewood handle, new list	25%
Stanley's iron handle	25%

BINDING, OILCLOTH.

Zinc	80%
Brass	70&10%
Brass plated	75&5%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Triumph	50&5%
Ford's Ship	40&10%
Irwin	50%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	25%
" " Large " $26.00	25%
Irwin Car	45%
Ford's Ship Auger pattern Car	40&10%
Center	40&10%
Countersink.	
No. 18 Wheeler's, per doz.	$1 25
No. 20 " "	1 75
American Snail head	75
" Rose "	90
" Flat	75
Mayhew's Flat	1 25
" Snail	1 25
Dowell	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	60%
German Pattern, per doz.	$0 60
German "	65
Gouge "	80
Spoon "	80
Countersink "	1 00
Reamer.	
Jenning's Square "	2 50
Standard Square "	75
German Octagon "	75
Screw Driver.	
No. 7 Common "	50
No. 1 Triumph "	1 25
No. 2 " "	1 —
No. 340 Shepardson's "	—
No. 1 Smith's "	— —

BLACKING, STOVE. (See Polish).

BLADES, SAW.

Butchers'.
Standard, ⅞ & 1⅛-in. 40%
Clock Spring 40%
Star 15%
Coil ..... each, $1 50

Hack.
Disston's ..... 25&5%
Flexible ..... 33⅓&5%
Star ..... 20&5%

Wood.
Jackson's ..... per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph 3 50
Forest Clipper 3 00

BLOCKS.

Snatch.
Wooden ..... 60&10%
Steel 50%

Tackle.
Iron Strapped 70%
Com. Steel 60%

BOARDS. (New List)

Stove ..... 50&10%

Wash.
Globe, single ..... per doz. $2 50
Globe, double ..... " 3 35
Peace Maker ..... " 3 00
Crystal Glass ..... " 4 00
Brass King ..... " 4 00
Nickel Plate ..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron ..... per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 1 80
No. 3, lead ..... " 2 00
No. 4, " ..... " 3 40
No. 113, brass plated.. " 1 10
No. N30, nickel plat'd. " 1 30
No. N31, " " " 1 80

BOLTS.

Carriage, Machine, etc.
Carriage, ⅜x6 and sizes smaller and shorter ..... 70&10%
Carriage, sizes larger and longer than ⅜x6 ..... 60&5%
Machine, ⅜x4 add sizes smaller and shorter ..... 70&10%
Machine, sizes larger and longer than ⅜x4 ..... 60&5%
Elevator ..... 50-10&5%
Plow ..... 60&10%
Stove ..... 60&10%
Tire 75%
Wagon Box Strap 70%

Mortis, Door.
Gem, iron 60%
Gem, bronze plated 30%

Barrel.
Cast 60%
Wrought .....
Wrought, bronzed 50%

Flush.
Wrought ..... 50&10%

Spring.
Wrought .....
Wrought, heavy .....

Square.
Cast ..... 50&10%
Wrought .....

BORERS.

Angular.
Miller's Falls ..... per doz. $13 00

Bung. Doz.
Enterprise Mfg. Co 's No 1... $14 00
" " " No 2.. 18 00

BOXES

Mail, No 1 2 10
Per doz $3.50 5.00 17.50

Miter.
New Langdon ..... 15&5%
Stanley's 30%
Seavey's ..... each, $1 50

BRACES.

Barber's ..... 50&10&10@50&10&15%
Fray's Genuine Spofford's 60%
" Nos. 66 to 136 ..... 50%
" No. 0108 ..... $3 50
" No. 08 ..... 2 75
" No. 010 ..... 2 85

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1, per doz. $9 00
" No. 2, " 9 00

Shelf.
Cast Iron, bronzed ..... 50-10&5%
Clover Wrought Steel ..... 70&10%
Clover Folding 70%

BROILERS.

Wire 70%
No. Cwron, Self-basting, 6doz .. $2 60

BUCKETS.

Pump, Rubber.
Wychoff ..... per gro. $4 75
Cooper ..... " 4 75
Champion ..... " 7 50
Victor ..... " 9 25
Star ..... " 5 00
IXL ..... " 6 75

Well.
Galv'd Qts 10 12 14
Per doz $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding ..... per doz. $2 10

BURRS, RIVETING.

Copper Burrs only 30%
Tinners' Iron Burrs only ..... 65&5%

BUTTS.

Cast Iron ..... 70&5%
Wrought Brass (New List) 40%
Wrought Steel, Bright.
Wrought Steel, Japanned.
Nos. 731 and - ..... 70&10%

CALIPERS.

Double ..... 65&5%
Inside and Outside ..... 65&5%
Wing 70%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M $3 75

Toe.
Shoenberger ..... per lb 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes ..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons 20 30 40
Each $4.25 $5.00 $6.25

Milk.
Holstein.
Nos 300 301 302
Gals 5 8 10
Per doz $26.00 $27.00 $29.00
Chicago Pattern.
Nos 105 108 110
Per doz $19.00 $21.50 $23.00
Iowa Pattern.
Nos 408 410
Per doz $23.50 $24.50
New Elgin Pattern.
Nos 705 708 710
Per doz $25.00 $27.00 $28.00
Burn Pattern
Nos 700 701
Gals 8 10
Price $2.40 $2.65

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular ..... each, $3 85
Diamond, Sling ..... " 6 50
Myers' Imperial ..... " 3 85
Myers' Clover Leaf ..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing ..... 50&10%
Bed ..... 60&5%
Common Plate.
Brass Wheel ..... 60&10%
Iron and porcelain wheels, new list ..... 60&5%
Philadelphia Plate, new list 70%
Martin's 60%
Payson's ..... 75&10%

CATCHERS, GRASS.

Carroll's, No. C ..... per doz. $4 25
Wildermuth's,
Nos 1 2 3
Per doz $5.60 $5.75 $6.25
Nos 4 5 6
Per doz $6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack ..... doz. pairs, $5 75
With Covert Snaps. " 5 00
With Slide ..... " 3 25
Without Slide ..... " 2 85

Bright Ox Chains.
⅝-in. $7.25; ¾-in. $8.45 per 100 lbs.

Cable Coil Chain.
Inch ..... 5/16 ⅜ 7/16 ½
Per 100 lbs. $10.50 $3.00 $7.00 $8.20
Inch ..... 5/16 ⅜ ½ ⅝
Per 100 lbs. $6.00 $5.90 $5.75 $5.65
Inch ..... ¾ ⅞ 1 1¼
Per 100 lbs $5.55 $5.55 $5.65

Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.

Cow Tie Chains.
American, 2 toggle ..... 50&5%
" toggle and snap... 50&5%
" open and closed ring ..... 50&5%

Halter Chains.
American, new list 33⅓%
German 60%
Niagara, new list 40%
Brown's, " 40%

Picture Chains.
Light Brass, 3 ft ..... per doz. $0 65
Heavy Brass, 3 ft .... " 1 00

Pump Chain
Galvanized, per 400 lbs $5 50

Safety Chain.
Brass 60%

Special Steel Loading Chain.
Inch ..... ½ 9/16 5/8
Per 100 lbs $16.00 $13.50 $12.50

Stretcher Chains.
5/16-in. $6.50; ½-in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's ..... 70&5%

Trace Chains.
Western Standard.
6½— 6-2 ..... per pair 30c
6½— 8-2 ..... " 34c
6½— 8-3 ..... " 33c
6½—10-2 ..... " 38c
7 — 8-2 ..... " 38c
7 —10-2 ..... " 42c
7 —10-1 ..... " 48c
7 —10-0 ..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch ..... ½ 9/16 ⅝
Per 100 lbs $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue ..... per gro. 75c
Red ..... " 65c
White ..... " 55c
Common White School Crayon ..... " 8c

CHARCOAL.

In bags ..... per bag 90c

CHECKS, DOOR.

Blount 33⅓%
Sargent's 33⅓%

CHIMNEY TOPS.

Iwan's Volcano 50%

CHISELS.

Box.
Inches 10 12 14
Round per doz $2.10 $2.25 $2.75
Flat " ... 2.85 3.60 4.20

Cold.
Good quality, ⅞ in. and larger ..... per lb. .12c
Smaller size per doz .....

Socket, Framing and Firmer.
Clover ..... 75&10%

Tanged, Firmer.
With handles ..... 30&5%

Choppers, See *Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers ..... per doz. $6 25
Yankee, for Yankee Screw Drivers 5 00

CHURNS.

Anti-Bent Wood,
Gal 5 7 10
Each $3.90 $4.60 $4.85
Belle, Barrel ..... 65&7½%
Common Dash, Gal. 4 5 6
Per doz $7.75 $8.50 $10.50
Union, Gal 5 7 10
Each $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's 30%

Carpenters'.
Steel Bar 25%

Hose.
Sherman's, brass, ¾-in., per doz.. 42c
Double, brass, ¾-in., " 90c

Saw Filers.
Disston's list, $30.00 ..... 30%
Stearns', No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1, $6.00; No. 3 $7.50.

CLAWS, TACK.

Cast, wood hdle ..... per doz. 45@60c
Forged steel, wood hdle " $0.80
Solid steel ..... " 1 00
Giant ..... " 50

CLEANERS.

Drain.
Iwan's Adjustable 55%
Iwan's Stationary ..... 40&5%

Pot.
Wire ..... per doz. $0 55

Side-Walk.
Steel ..... per doz. $3 25
XLCR ..... 65&5%

CLEAVERS

Family.
Griffin, Inch 6 7 8
Per doz $5.50 $5.75 $6.25
Royal ..... per doz. 2 25

Butchers.
Plumbs 25%

CLEVISES

Malleable ..... 5½c lb.

CLIPPERS.

Bolt ..... $1.90@4.75

CLIPS.

Axle ..... 65&5%

Damper.
Standard ..... per doz. 65c
Troy ..... " 38c

Hame ..... " 17

CLOTH.

Emery.
Star 50%
B. & A 50%

Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll... 2 75
4 and 5 ..... " .. 3 00
6 ..... " .. 3 25
7 and 8 ..... " .. 3 75

Screen Wire.
12 mesh, painted, per 100 sq. ft.. 1 35

COCKS AND FAUCETS.

Compression Plain Bibbs... 60, 10&5%
Lever Bibb Cocks ..... 60, 10&5%
Compression Hose Bibbs .. 50—10&5%
Telegraph Faucets (new list)..50—5%
Racking Cocks (new list)... 60, 10&5%
Compression Lock C'ks (new list). 70%
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz.... $0 85
Milk Can Faucets, per doz.. $3.00-4.20
Petroleum Faucets ..... 75&5%

COLLARS, STOVE PIPE.

Inches 5 6 7
Plain Tin .. per gro. $1.90 $2.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass " 3.00 5.50 4.25

COMBS, CURRY.

Nos... 000 11 15 30 80 108
Per Doz.. $.37 .60 1.00 .90 1.15 .90
Nos... 299 320 300 522 620 1400
Per Doz. $1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters' ..... 60—10—10%
Pencil—Faber's ..... per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb ..... per lb 30c
1½ lb ..... 31c 2 lb... " 29c
3 lb and larger ..... " 28c

CORD.

Picture
White Wire (new list) ..... 85&10%

Sash.
Monarch Braided Flax ... per lb
Silver Lake. white. 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone ..... 8-32 in. " 29c

CORKSCREWS.

Humason & Beckley 33⅓%
Walker's 33⅓%
Williamson's Regular ..... 40&10%
Williamson's Forged Worm 50%

COTTERS, SPRING.

All sizes—new list ..... 90&20%

COUPLINGS, HOSE.

Brass ..... per doz. $
Brass Plated ..... " 50

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine ... per doz. $[illegible]

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3½c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%

Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202, list, $1.50 ea.....40&7½%

Pipe.
Stanwoods. No.... 1 2 3
Each.....$0.85 $1.50 $4.00

Slaw and Crout.
3-knife Crout.....per doz. $9 75
1-knife Slaw..... " 1 65
2-knife Slaw..... " 2 25
Washer..... " 7 75

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American.....50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant.....33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan s Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.

Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel, painted...per doz. $7 03
1⅛ in. 4-panel, painted... " 9 50
1⅛ in. 3-panel, natural pine, fancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls No. 12..... " 2 10

Hand.
Goodell's Automatic.
Nos..... 01 03 3 20
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear. per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25

Reciprocating.
Goodell's.....per doz. 16 50

Bit Stock.
Standard List..60&5%@60%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....60%
Champion.....40&10%
Champion Pattern.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....50, 10, 5&2½%
Yankee Ratchet.....50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.60

Corrugated Conductor.
Discount.....75&10%

Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.85 $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.25
Plan'd, " .. 2.15 2.65 3.40

Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.65 $0.92
Planished, " .. 1.40 1.70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size.....5-lb. pkgs. ½ kegs, kegs.
No 60 to 150, per lb.. 6c 4c 4c
Flour..... " ... 5c 3c 3c

ENAMEL, IRON.

A-B Iron Enamel, 3 doz. case, ...per gro., 15 00
Peerless..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig

EYES.

Bright Wire Screw—See Goods, B. W
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 75
Whisson's Imp..... " 5 25

FORKS.

Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 00
Coal, Coke, Cottonseed.....30%
Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging.....65&5%
Scoop.....30%
Feeder.
3-tine.....60&5%
4 " .....60&5%
Manure.
4-tine.....60%
Ore.....60%
Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.80 2 30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20

GAUGES

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.....
.....60&10%
Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single.....90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12 c
A White..... " 15 c
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....90%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... " 9 50
Hub Lightning..... " 5 25
Paragon..... " 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 7 8 9
Per doz.....$8.25 9.00 10.50
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%
Engineers'.
Plumbs.....60&5%
Farriers'.
Plumbs.....40&10%
Machinists'.
Plumbs.....60&5%
Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%
Riveting.
Plumbs.....40&12½%
Shoe.
Cast.....per doz. $0 75
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....80&5%
5 lbs. and over.....50&10%
Masons'.
Single and Double Face.....30&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 38
Peck's Adjustable.... " 2 10
Ives' Adjustable.....per set, 1 35
Axe.....60%
Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 20c; Large, 38c per doz.
Applewood, Socket, Firmer, Assorted.....per doz $0 24
Coal Pick.....50&10%
Drifting Pick.....50&10%
File, assorted, 13c; Large, 16c per doz.
Hammer.
Adze Eye.....per doz. $0 40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c
Hatchet..... " 40
Hay and Manure Fork.....30%
Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80
Screw Driver.
Assorted..... " 37
Large..... " 48
Shovel and Spade.....60%

HANGERS.

Barn Door.
Nansen.....60&10%
Matchless.....70&10%
Storm King.....60%
World's Best.....50%
Wagner's Adjustable.....70&10%
Warehouse.....60%
Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%
Eave Trough.
Baker's.....per gro. $2 35
Imperial.....20%
Wire.....33⅓%
Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crown.....60-10&5%
Cast Claw.....per doz. $1 10@1 35
Cast Shingling.... " $0 85@1 10
Germantown.....30%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wensleman's No. 1.....per doz. $9 00
Wensleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity ... per dos. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 05
Gate.
Clark's..... 1 2 3
Hgs & Latch..doz. $2.50 2.90 4.00
Hinges only... " 1.90 2.20
Latches only . " .70 .75
Knuckle.....per dos prs. $6 00
Leed's..... " sets 6 75
Superior..... " prs. 9 50
Spring.
American.....20%
Chicago.....25&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....30%
New Idea.....per gro. $8 00
Oxford.....30%
Wrought Iron
New Lists .....
McKinney
Light Strap Hinges.....60%
Heavy Strap Hinges.....65%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $3 75
14 to 20 in..... " " 3 65
22 to 36 in..... " " 3 40
Screw Hook and Eye.
½ in.....per 100 lbs. $6 75
⅝ in..... " " 7 75
¾ in..... " " 9 75

HOES.

Garden .....70&10%
Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Weed.....75&15%

HOLLOW WARE—See Ware.

HOOKS.

And Eyes.
Brass.....50&10%
Iron.....65&10%
Awning.....per gro. $1 00
Belt.
Brown's.....70&5%
Jones'.....65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz..... $1.35 1.65 1.75 2.20
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle. per doz. $7 00
Chain.
Inch..... ¼&5/16 ⅜ 7/16 ½
Per 100...$7.00-8.10 9.75 11.50 12.00
Clothes Lines.
Japanned.....per doz 22c@24c
Galvanized..... " 40c
Coat and Hat
Cast Iron.... per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.....25%
Wrought.....20%
Corn.
Common, unpolished, per doz. $1 50
Little Giant..... " 3 25
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 2 75
Hammock.
With plate.....per doz. 50
With screw..... " 45
Lambrequin, or Drapery, per gro. .21c
Picture.....50%@50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring.....per lb. 5½c

HOOPS, TUB.

Elastic... per case of 2 doz.... $1 50

HOSE, GARDEN.

		Coupled, per ft.
Heron, 3 ply-¾" guar. press	55 lbs.	7½c
Crane.. " " "	75 "	8½c
Falcon " " "	95 "	9½c
Eagle " " "	120 "	10½c
Condor " " "	150 "	11½c
High Test " " "	200 "	12½c

COTTON COV. RUBBER HOSE.

High Grade-¾"-guar. press.	400 lbs.	11½
Special " " "	300 "	9½c
Leader " " "	100 "	7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz.....$2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro.....$5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro.....$3.50 9.00 24.50
Nos..... 60 50 64 65
Per doz.....$2.15 2.15 .65 1.45
Brinkerhoff's.
Per gro.....$14 40

IRON.

See Metals.—First column.

IRONS.

Curling.
X.....per doz. $0 40
Y..... " 50
Z..... " 58
Jewel..... " 85
Imperial..... " 1 00
Pinking..... " 70
Plane.
Wood Bench.....20&5%
Sad.
Charcoal.....per doz.$11 00
Common, polished, per 100 lb. 4 50
Common, nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1..... " 5 75
Laundry, No. 2..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise, per set 93
No. 55 " " " 90
No. 50 T, " " 1 00
No. 55 T, " " 95
Tailors' Sad.....per lb. 5½
Tailors' Geese..... " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest.. " 6 25
Sutton.....each.... 2 00

JACKS.

Locomotive.....70%
Wagon.
Oliver,
Nos..... 0 00
Each.....$0.00 $0.80

Standard.
Nos..... 1 2
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each..... $0.85 1.20 2.00

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper.....per lb., 27c
Maslin.....65%
Sugar.....50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, doz.$3 85
California..... 3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard.....70%
Adjustable.....15%
Barton's Carpenters'.....10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge...doz. $10 50
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated. " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point.. " 8 50
Hedge.
Challenge.....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single..... " 40
Common, Double..... " 50
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.....per doz. $0 60@1 00
Lander's..... " 1 40@1 75
Scraping.
Beech Handle..... 75@1 00
Lander's..... 5 25@6 00

KNOBS.

Door.
Mineral.....per doz. $0 80
Porcelain..... " 90
Jet..... " 90

LADDERS.

Common Long.
Per ft.....9c@14c
Extension.
Per ft.....14c
Step.
Common, per ft.....7½c
Common, with Shelf, add 10c.
Keystone.....15c
Triumph, per ft.....20c

LANTERNS.

Bull's Eye Police.
3 -in. Flash Light....per doz. $6 00
2¾-in. Regular..... " 4 90
3 -in. Regular..... " 5 50
Tubular.
Dietz & Hanes'.. .....net prices.

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz..... $0 55 .70 2.75

LEATHER, LACE.

Cut.....33⅓%
Sides.
Ex. Quality ..... per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.....50%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Mansons', in 100-ft. hanks...doz. 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. Jute..... " 1 15
60-ft. Sisal..... " 1 40
72-ft. Sisal..... " 2 15
50-ft. Cotton..... " 1 15
40-ft. Braided Cotton. " 25

LINING, STOVE.

In Bricks.....per crate, 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright..... "	2 60	4 00
Leather Riveting.		
Chicago, Pomeroy....per doz.		$0 00
Excelsior..... "		2 00
Handy..... "		2 00
Little Giant..... "		3 00
Pony, Pomeroy..... "		7 20
Washing.		
Winner.....per doz.		54 00
Keystone..... "		54 00
U. S. Steel..... "		60 00
Advance, f.o.b.Chicago "		24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 25
" Lignumvitæ... " 4 00
Square Hickory..... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood..... " 1 70
Hickory..... " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS

Door
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%
Stove.
No. 2.....per gro. $3 25
No. 1..... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with ring.....per doz. 60

MATTOCKS.

Plumb.....65&10%
Extra.....60%

MAULS.

Iron, lbs.....	10	13	16	18
Per doz....	$4.00	4.50	5.25	5.00
Wood face, lbs.....	10	12	14	
Per doz.....	$5.00	5.50	6.00	

Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk.	1 pk.	bu.
Galvanized, per doz.	$2.25	3.00	3.85
Japanned.. "	1.75	2.45	3.15

MICA.

First Quality.....40&5%
Second Quality.....50&5%

MILLS, COFFEE.

Enterprise.....25%
Parker.....40-12½&2½%
Arcade.....40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.

Pounds.....	¾	1	1½	2
Per dozen....	$2.00	2.35	2.65	3.25

MOWERS, LAWN.

Gladiator—B. B.

Inches.....	16	18	20
Each.....	6.50	7.25	8.00
King Universal—B. B.			
Each.....	5.25	5.75	6 00
Inches.....	14	16	18
Big Giant.....	3.50	3.90	4.25
Little Giant.....	2.50	2.65	2.75

Philadelphia.
All Styles, except A & E, 60, 10&10%
Style A.....50&10%
Style E, High Wheel....60, 10&10%
Drexels.....40%
All Day.....Net Price

NAILS.

Cut Steel.....rates, $2 50
Cut Iron..... 2 60
Wire.
Small Lots..... $2 35
Carload Lots..... 2 15
Cement Coated..... 2 30
Horse Shoe.
Ausable.....55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....35&5%
Clover Leaf.....per lb., net, 10½c
Picture.
Brass Heads.....25%
Brads.....35%
Furniture.....15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforeweaving .80,10&2½%
Galvanized after weaving.....80&7½%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen..... $4.00 4.25
End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co....60%
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Genuine Gem.....per dos. $3 00
Magic..... " 3 00
Mystic..... " 3 00

NUTS, HOT PRESSED.

Square Blank.
In ½ 9/16 ⅝ ¾ ⅞ 1
lb 9½c 8c 6½c 5½c 5½c 5c 4½c
Square Tapped.
In. ½ 9/16 ⅝ ¾ ⅞ 1
lb. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60%
Zinc.....60%
Engineers'.
Cannon.....55%
Tin.....per doz. $2 00@$2 25
Machine.
Common.....per doz. $0 50
Copper Plated Steel... " 1 00
Malleable Iron.....60, 10&5%
Japanned.....65@75c

OPENERS.

Box.

Inches.....	10	12	14
Flat.....per doz.	$2.85	3.60	4.15
Round.... "	2.10	2.25	2.75

Can.
Delmonico.....per doz $1 50
Never Slip..... " 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. 11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought.....75&5%
Champion.....50%
Eureka.....40, 10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt., without gauge, per doz. $2 50
20-qt., " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt., IC Tin..... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt., IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.

Galv'd, qts.	14	16	18	20
Per dos....	$3.75	4.00	4.75	5.25
Water.				
Galvanized... qts.	10	12	14	
Per dos.....	$1.95	2.20	2.45	

Wood.
Cable, 2-Hoop.....per dos. $1 70
Cable, 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop.... " 1 60
Standard, 3-Hoop.... " 1 80

PANS

Dripping.....60&5%
Fry
Common.....75&10%
Acme.....70%
Roasting.
Paxton,

Nos.....	1	2	3	4
Per dos....	$4.75	5.75	6.50	7.50
Neverburn..	4.00	4.50	5.50	6.00

Savory, No. 200.....per doz. $5.00

PAPER.

Building.
Plain.....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin....per roll, 40
No. 30, Red Rosin.... " 55
Sand and Emery.
Star..... low list, 50%
B. & A.....50%
Wrapping.
Drab Fiber.....per lb. $0 00
Rag..... " 0 00

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable..... " 0 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel,

Inches.....	6	8	10	12
Per doz.....	$2.00	2.60	2.95	3.75

Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5gro $0 52
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... " 1 60
Spiral..... " 1 90

PIPE.

Conductor.

	Gal. Steel	Charcoal
L. C. L. to Dealers:—		
Eastern	70&10%	50&10&2½%
Pittsburgh	75&10&5%	60%
Central	75&10%	60%
Northwestern	75&7½%	60%
Western	70&12½%	50&12½%
Tennessee	70&10%	50&12½%
Southern	70%	50&12½%
Southwestern	70%	50&5%

Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.

Lead.
Full coils.....per lb. 7½c
Cut coils..... " 7½c
Stove

Acme—Inches....	5	6	7
Smooth, per jt...	8½c	9½c	10½c
Planished, "	32 c	33 c	43 c
Peerless—Smooth,	7½c	8 c	9½c
Polished.....	14½c	15½c	18 c
Planished.....	28 c	31 c	35½c
Made-up—Inches..	5	6	7
Smooth.....	7½c	8 c	9½c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7"to6"
	—Cents—			
Battle Axe Blue...	7	7½	9½	10½
Can't Slip " ..	7½	8½	10	11
Peerless " ..	7½	8½	10	11
Duplex " ..	10	11	13	14
Yale, Rus. Fin....	15	16	17	18
Duplex Planished.	29	31	37	38
Galvano, Gal.....	15	16	17	18

If wanted made up, add per joint or grooved, 1c; riveted, 1½c. Grating made-up pipe extra.

Wrought Iron Gas Pipe.
⅛@½-in., black.....discount, 60%
⅛@½-in., black..... " 60,10&5%
¾-in. to 6-in, black... " 70%
7-in. to 12-in., black... " 62½%
⅛@½-in., galvanized.... " 42%
⅛@½-in., galvanized.... " 50%
¾-in. to 6-in., galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench.....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Giant, Button's—80% off list.
Cutting
Bernard's.....30%
Lodi.....50%
Upper End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co....60%
Fencing.
Black Bull.....per doz. $8 25
Farmers' Choice.....per doz. $8 00
Russell's..... " 8 25
Flat and Round Nose.
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%

Gas.—Inches..	7	8	10	12
Per doz.....	$3.00	3.50	4.50	5.50

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS

Common.....60&10&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'l " 80
Nickel Plated, coil hand'l " 65

POKES, ANIMAL.

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
A-B Oil Metal Polish, 4-oz. bottles, 3 doz. case, per gr. $9 00
1-gal. can..... 00
White Silk, half pints, per doz. $2 00
White Silk, 6-oz. cans, per doz. 1 00
Shoe.
M. C. D.....per doz.....36c@50c
F. C. O..... " 40c
T M..... .55c@$1 75
Imperial.....per gro..... 5 00
Stove.
A-B Polishes.
Liquid Stove Polish.
3 doz. in case.....$2 25
6 " " .....gr. 9 00
Fireproof Stove Polish, 3 and 6 doz. in case.....gr., 12 00
Liquid Waterproof Stove Polish, 10-oz. cans, per gro., 12 00
Oil Paste Polish.
6-oz. cans, 3 doz. case..... 2 25
1-lb. " 3 " " 3 75
5-lb. " per can..... 50
Dry Powdered Stove Polish.
5-lb. box..... 75
100-lb. bbls.....per lb. 12
Powder Polish. 3 doz. 6 do. 12 doz.
$2.25 $4.50 $9 00
Water Paste Stove Polish, ½-lb. boxes, 3 doz. case..per gro., 12 00
Black Eagle, 1-lb. cans, pr gr, $15 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans....per doz. 75
Paste, ½-lb. cans.... " 1 05
Liquid, ½-pt. cans... " 1 05
Liquid, 6-oz. cans... " 75
Black Jack, ½-lb. cans. " 9 25
Dixon's Carb. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 30
Tri-qt..... " 3 75

POTS, FIRE.

Clayton & Lambert's,each,$4 75@6 25
Slate City.....each, 6 25
Stem.....each,$6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....25%

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy.....each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Jack—Giant..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in.... " 1 75
Wood Wheel, 6-in. pass knot, ...per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Trush.
Common.....per doz. $0 16
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos.....	1	2	3	4
Each.....	$1.00	1.15	1.30	1.70

Spray.
Blizzard.....per doz.$14 50
Cyclone, tin..... " 3 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each,... 3 25

PUNCHES.

Conductors'.
No 22.....per doz $2 2
Machine.....per lb 10
Saddlers'.
Common.....per doz 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 3

RAIL.

Barn Door.
Matchless, 1-in..... 3
Matchless, 1¼-in..... 3½
Storm King..... 4
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron...per ft. 8½c

RAKES.

Coal or Wood.....per doz. $5 2
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 0
Lawn—Wood.
XXX.....per doz. $3 0
Automatic..... " 5 2
Lawn Queen..... " 2 7
Jumbo, 36 teeth..... " 5 2

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

(All Sizes)

Japanned, Bronzed and Plated...70%
White Porcelain Enameled...50&10%
Solid Brass and Bronze Metal....40%
Single Valve (Baseboard and Sidewall).....70&10%

REGISTER FACES

Japanned, Bronzed and Plated
4x6 to 14x14.....70%
14x14 to 36x42.....75&10%
Heavy Round Gratings.....75&10%
White Porcelain Enameled...50&10%
Solid Brass or Bronze Metal.....40%

RINGS.

Bull.

Copper.....	2½ in.	3in.
Per doz.....	$1 10	$1 40
Rea's Improved Self-Piercing copper, pr doz	2 00	....
Steel, per doz.....	85	95
Nickel plated.....	1 35	....

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers.... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Rings..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 45
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 22
Ball, round..... " 22

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz, 45c

RIVET SETS

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com on reels. .per lb. 11½c
¼, 5-16 in Com. in coils.. " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal.
1st Quality.....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb.15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....50&10%
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....25%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 60
Disston's .....%25
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprise, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling.....25%
One Man.....50%
Panel
Brown's.....30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's.....25%
Disston's.....25%
Wood
Common.....per doz. $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....60&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 13 70
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel.....per doz., 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea..	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in.....	1	1½	1¾
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....20&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial

Nos..	1	2	3	4	5	6
Per doz.	18c	20c	26c	30c	23c	25c

Wood.
F. H. Bright.....87½&5%
R H Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $8 00
Clipper, grass..... " 8 25
Clover Leaf Dutchman..... " 7 50
Honest Dutchman..... " 7 50
Be Ve Be..... " 7 50

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 39
Square, common..... " 42
Octagon, common.... " 33
No. 5, square..... " 75
Cup point, knurled.... " 75
Rivet.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch.... " 6 50
Disston's X Cut ..... " 12 00
German..... " 1 05
Leach's..... " 80
Nash's Hand..... " 3 15
Nash's X Cut..... " 4 20
Stillman's Lever..... " 1 30
Stillman's X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz $1 60
Smith & Hemenway 20%

SHAVES, SPOKE

Iron.....per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's .....50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1.....per doz $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
California Pat., 10-in.. " 4 00
Draw Cut, No. 3..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 2.10 2.90 2.80
Star.....per doz $4 00
Sheep—No BBA.
Inches..... 6 6½ 7
Reg. Grip.....$11.25 11.50 12.00
Nar. Grip..dos.... 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 .42 .70
Hatfield's.
Per set..... $0.75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No 2 Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames' new list .....Discount, 12½%
Per doz
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, etc.
Black Diamond.....per doz. $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames, new list .....Discount, 12½%
Snow.
Per doz.....$1.05@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop, Bush..... " 5 75
Patent Loop, Grass..... " 5 50

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz..... 30c 35c 40c 50c

Reliance.
Per doz.....light, $1.35; heavy, $2 00
Star.
Per doz.....light, 90c; heavy, $1 35
Torrey's.....per doz. $1 35
Warner's No..... 11 12
Per doz..... 75c $1 35

SQUARES.

Steel and Iron.....70&10%
(Add for bluing, $2.50 per doz., net.)
Miter.
Try.
Try and Bevel.
Try and Miter.
Fox's.....per doz. $5 75
Winterbottom's.....70%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood.. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, porc'n bowl " 1 90
Iron Frame, glass bowl . " 2 35
Little Giant, tin'd iron . " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated ... " 4 50

STAPLES

Blind.
Barbed.....per lb . . 9½@9½c
Butter Tub..... " .....8 @8½c
Fence—less than carload.
Polished.....per 100 lbs. $2 30
Galvanized..... " 2 60
Netting.
Galvanized.....per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....80-10&10%
Extra heavy.....75&10%

STEELYARD.
Discount 25%.

STONES.

Axe.
Hindostan.....per lb 8½@7 c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz.$23 00
Arkansas Soft..... " 15 50
Hindostan .....per lb 6½@6½
Oil—Unmounted.
Arkansas Hard.....per lb $2 05
Arkansas Soft ..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 35
Washita..... " 25
Sythe.
Black Diamond.....per gro. $5 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille ..... " 7 00
Quinnebog..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per dos. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... " 55
Gem, cor'd, decorated... " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 50

STOVE PIPE—See Pipe.
STOVE BOARDS—See Boards
STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz prs., $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's.....per doz. $6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb. $0 70
Wrought Steel.....per gro. 4 50

TACKS.

American Cut.....80&15%
American Wire.....85&20%
Bill Posters Cut.....90&20%
Blued Carpet.....80&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut.....90&20%
Upholsters' Wire.....90&10%
Double Pointed.....90%
Copper.....per lb. 32c
Canvas Nails.....75&5%
Clout Nails.....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Ballon.....per doz. $1 25
Harper's..... " 1 25
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker ..per doz. holes $0 13
Tin Choker..... " " 75
Delusion.....per dos. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....20%
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag.....each, $2 75
Handy..... " 1 85
Warehouse.....50&10%
No..... 1 2 3
Half Ironed..... $3.00 3.85 5.50
Full Ironed..... 3.45 4.50 6.45

TUBS, WASH

Standard, Wood. Ex.
Nos..... 0 2 1 large
Per doz.....$5.00 6.00 7.00 9.50
Dowell.
Per doz..... 5.25 6.35 7.00 9.50
Cedar.
Per doz..... 6.10 7.10 7.90 10.80
Indurated.
Per doz..... 8.55 9.45 10.80 13.50
Galvanized.
No..... 1 2 3
Per doz.....$6.00 6.75 7.75

TWINE.

Per lb.
3-ply Cotton Wrapping 25c
4 " " " 25c
" " Extra Wrapping.....27c
4 " " " Hvy. Wrapping 25c
4 " " Wrapping on tubes....27c
3 " " " " cones.....25c
4 " " " " " 25c
India Hemp, ½-lb. balls 19c
" " ½-lb. " 18c
" " ½-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply Jute, ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-lb. balls.....9½c
Seine.
Nos..... 9 12 15
Soft.....per lb 26½ 26 25
Med..... " 26½ 26 25
Hard..... " 27 26½ 26
Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " " 23c
3-ply "B" in hanks 18c
4 " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks..27c
Fodder or Lath.
150 strand.....6½c
200 strand.....—c

VISES.

Phoenix.....30%
Phoenix Oval Slide,
Inches..... 2½ 3 3½ 4½
Each..... $1.25 1.50 1.85 2.75
Parker's Parallel.....15&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box.....40&5%
Adams' Mechanics'.....each 2 50
Williamson's Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles.....60&10%
Covered Ware.
Tin'd and Turn'd.....35&10%
Enameled.....45&10%
Glue Pots.
Tinned.....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O G. cast iron . . .per lb. 2½c
Wrought iron in bulk, per lb.:
In. ⅜ ½ ⅝ ¾ ⅞ 1
⅜c 6½c 6c 4½c 4½c 4½c 3½c
Wrought steel in 5-lb. boxes, per lb.:
In. ⅜ ½ ⅝ ¾ ⅞ 1
10c 7c 6c 5½c 5c 5c 4½c

WASHING MACHINES—
See Machines.

WEDGES.

Ax.....per doz. $0 30
Galling.....per lb. 10½
Saw..... " 8½

WEANERS.

Calf.
Fuller's, per dos.....$2 00 to $2 50
Tyler's Safety, per dos 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per dos..... 3 00
Hoosier, per dos..... 3 50 to 4 00

WEIGHTS.

Hitching.....per lb. 2½c
Sash—f.o.b. Chicago....pr ton, $6 50

WHEEL BARROWS.

Common Railroad.....per dos. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 30 00
Klondike Steel Tray.. " 28 00

WHEEL BARROWS.

Common Railroad.....per dos. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 30 00
Klondike Steel Tray.. " 28 00

WHEELS.

Corundum.....70&10&5%
Emery.....75&5%
Well. Inches.. 8 10 12 14
Per doz..... $2.40 3.25 4.00 6.00

WIRE.

	Painted.	Galv'd
Barbed.		
Carloads . . per 100 lbs.	$2.33	$2.63
Less than car "	2.43	2.73
Brass.		
In coils		20%
In 1-lb. spools, new list		50%
Broom—Tinned . . .		60&10&10&10%
Cable—Same price as Barbed Wire.		
Copper.		
In coils		20&10%.33⅓%
1-lb. spools, new list		50&10%
Fence—Smooth.		
Nos. 6 to 9, An'eal'd, pr 100 lbs.	$2 30	
Nos. 6 to 9, Galv'd.. "	2 60	
Hair—New List		50%
Market.		
Bright, full bdles		70&5%
Bright, broken bdles		70%
Coppered, full bdles		70%
Coppered, broken bdles		65&10%
Tinned, full bdles		75&5%
Tinned, broken bdles		65&10%
Picture—In coils		80% @80&10%
In 5-lb. spools.....per lb.		26c
Plain—Small lots	$2 10	
Car lots	2 05	

Small spools 5c per 100 higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1 .....85cnet
Always Ready.....50%
Agricultural.....75&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....70%

WRINGERS.

No. 22, Guarantee....per dos. $32 50
No. 110, Guarantee.... " 32 50
No. 110, Brighton..... " 23 50
No. 110, Bicycle..... " 31 50
No. 500, Royal..... " 32 50
No. 350, Universal..... " 28 00
No. 300, Novelty..... " 28 00
No. 310, Keystone..... " 28 00
No. 100, Rival..... " 23 50

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Mueller, L. J., Furnace Co. 12
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National Sheet Metal Roofing Co. 49
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Nickel Plate Stove Polish Co. 48
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CLASSIFIED LIST.

Augers—Post Hole

Iwan Bros., Streator, Ill

Boilers—Hot Water Combination

Stolz Mfg. Co., Frank D., Chicago, Ill

Boilers—Steam

Boynton Furnace Co., Chicago, Ill

Boiler Handles

Berger Bros. Co., Philadelphia, Pa

Bolts

Columbus Bolt Wks., Columbus, O

Boxes—Hardware

Green Co., A. H., New York

Brakes—Cornice

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson, Mfg. Co., J. M., Cincinnati

Brass and Copper

Hungerford, U. T., Brass & Copper Co. New York, N. Y
Hussey & Co., C. G., Pittsburg, Pa

Cans

Stuber & Kuck, Peoria, Il

Carpenters' Tools

Baker-McMillen Co., Akron, O
Disston & Sons, Henry, Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa
Lawson Mfg. Co., Chicago, Ill
North Bros. Mfg. Co., Philadelphia, Pa
Pullman Mfg. Co., Rochester, N. Y
Simmons Hdw. Co., St. Louis, Mo
Smith & Hemenway Co., New York, N.Y

Carriage Forgings

Columbus Bolt Works, Columbus, O

Ceilings

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley-Voshardt Co., Chicago, Ill
Keighley Met. Ceiling Co., Pittsburg, Pa
Milwaukee Corrugating Co., Milwaukee, Wis
Schoedinger, F. O., Columbus, O
Wheeling Corrugating Co., Wheeling, W. Va

Cement—Plumbers

Obermayer, Co., S. Cincinnati, O

Cement—Roofing

Auld & Conger Co., Cleveland, O
Conners, Wm. Paint Mfg. Co., Troy, N. Y

Chains—Jack and Safety

Hungerford, U. T. Brass & Copper Co., New York

Chimney Tops

Iwan Bros., Streator, Ill
Powers & Williams, Streator, Ill

Coil Springs

Pullman Mfg. Co., Rochester, N.Y

Conductor Hangers

Berger Bros. Co., Philadelphia, Pa

Conductor Pipe

American Rolling Mill Co. Middleton, Ohio
Berger Mfg. Co., Canton, O
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Clark, Quien & Morse, Peoria, Ill
Delphos Mfg. Co. Delphos, Ohio
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Schoedinger F. O., Columbus, O

Copper and Brass

Hungerford, U. T., Brass & Copper Co., New York, N. Y
Hussey & Co., C. G., Pittsburg, Pa

Core Compound

Obermayer Co., S., Cincinnati, O

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Berger Mfg. Co. Canton, O
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co. Canton, O
Schoedinger, F. O., Columbus, Ohio

Cornice Brakes

Bertsch & Co., Cambridge City, Ind
Dries & Krump Mfg. Co., Chicago, Ill
Niagara Machine & Tool Wks., Buffalo, N. Y.
Robinson, Mfg. Co., J. M., Cincinnati, O

Counters

Heller & Co., W. B. Montpelier, O

Couplings—Solderless

Modern Improvements Mfg. Co. Brooklyn, N. Y.

Crimping Machines

Robinson, Mfg. Co., J. M., Cincinnati, O

Cutlery

Droescher, S. R., New York, N. Y
Smith & Hemingway Co., New York, N.Y

Cut Offs—Rain Water

Huenefeld Co., E. H. Cincinnati, O
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Sullivan-Geiger Co., The Indianapolis, Ind.

Dampers

Howes Co., S. M. Boston, Mass

Door Hangers

Griffin Mfg. Co., Erie, Pa
Safety Door Hanger Co., Ashland, O

Door Holders

Caldwell Mfg. Co., Rochester, N. Y

Eaves Trough

Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Delphos Mfg. Co., Delphos, Ohio
Eller Mfg. Co., Canton, O
La Crosse Steel Roof Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Schoedinger, F. O., Columbus, O
Whitacre, J. E. Mfg. Co., Rockford, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Eaves Trough Hangers

Canton Mfg. Co., Canton, Ohio

Elbows—Conductor Pipe

Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Dieckmann, Ferdinand, Cincinnati, O
Eller Mfg. Co., Canton, O
Milwaukee Corrugating Co., Milwaukee, Wis.
Wheeling Corrugat'g Co., Wheeling, W. Va

Elevators

Kimball Bros. Co. Council Bluffs, Ia

Enameled Ware

Lalance & Grosjean Mfg. Co., Chicago, Ill
Star Enameling & Stamping Co., Pittsburgh, Pa

Fencing—Wire

American Steel & Wire Co., Chicago, Ill
Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Files

Carver File Wks, Philadelphia, Pa
Disston, Henry & Sons, Philadelphia, Pa

Fixtures—Store

Warren Mfg. Co., J. D., Chicago, Ill

Food Choppers

Enterprise Mfg. Co. of Pa. Philadelphia, Pa.

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y

Foundry Supplies

Obermayer, S. Co., Cincinnati, O

Furnace Cement

Conners Paint Mfg. Co., Wm., St. Louis, Mo

Furnaces—Hot Air

American Furnace Co., St. Louis, Mo
Boynton Furnace Co., Chicago, Ill
Excelsior Steel Furnace Co., Chicago, Ill
Floyd-Wells Co., The Chicago, Ill and Royersford, Pa
Fox Furnace Co., Elyria, Ohio
Germer Stove Co., Erie, Pa
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg. Co., St. Louis, Mo
Henry & Scheible Co., Cleveland, O
Kelsey Heating Co., Syracuse, N. Y
May-Fieberger Co., The Akron, Ohio
Monroe Fdy. & Furn. Co., Monroe, Mich
Ralt & Co., Walter S. Chicago, Ill
Schwab, R. J. & Sons Co., Milwaukee, Wis
Smith Co., Chas., Chicago, Ill
Stove & Range Co of Pittsburgh, Pittsburgh, Pa
Tubular Heating & Ventilating Co., Philadelphia, Pa
XXth Century Heat. & Vent. Co., Akron, Ohio
Youngstown Furn. & Supply Co., Youngstown, O

Furnaces—Soldering

Clayton & Lambert Mfg. Co., Detroit, Mich
Turner Brass Works, Sycamore, Ill

Furnace Pipe and Fittings

Excelsior Steel Furnace Co., Chicago, Ill
Green Fdy. & Furn. Wks., Des Moines, Ia
Michigan Safety Furnace Pipe Co., Detroit, Mich

Gas Stoves

American Beauty Stove Co., Erie, Pa
Economy Stove Co., Cleveland, O
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa

Grain Bins

Denning Wire & Fence Co., Cedar Rapids, Ia

Hangers—Garment

Pullman Mfg. Co., Rochester, N.Y

Hardware Delivery Wagons

Sycamore Wagon Works, Sycamore, Ill

Hardware Jobbers

Clark, Quien & Morse, Peoria, Il
Paxton & Gallagher Co., Omaha, Neb
Simmons Hdw. Co., St. Louis, Mo

Hardware Specialties

Caldwell Mfg. Co., Rochester, N. Y
Enterprise Mfg. Co. of Pa., Philadelphia, Pa
Paxton & Gallagher Co., Omaha, Neb
Pullman Mfg. Co., Rochester, N. Y
Smith & Hemenway Co., New York, N. Y

Heaters—Hot Water

Detroit Heating & Lighting Co., Detroit, Mich

Hinges

Griffin Mfg. Co., Erie, Pa
Lawson Mfg. Co., Chicago, Ill

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Hones
Droescher, S. R., New York, N. Y

Horse Nails
Standard Horse Nail Co., New Brighton, Penna

Horse Shoes
American Steel & Wire Co., Chicago Ill

Ice Cream Freezers
North Bros. Mfg. Co., Philadelphia, Pa

Iron Enamel
Nickel Plate Stove Polish Co., Chicago, Ill

Kitchen Utensils
Avery Stamping Co. Cleveland, O
Lalance & Grosjean Mfg. Co., Chicago, Ill
Star Enameling and Stamping Co., Pittsburgh, Pa

Lard Presses
Enterprise Mfg. Co. of Pa. Philadelphia, Pa

Lawn Fence
Denning Wire & Fence Co., Cedar Rapids, Ia

Levels
Baker-McMillen Co., Akron, O

Lighting
Ideal Epworth Acetylene Co. Waterloo, Iowa and Johnstown, Penna

Lighting Systems
Detroit Heating & Lighting Co., Detroit, Mich

Lightning Rod
Electra Lightning Rod Co. Cresco, Ia
Foy, Edw. A. & Co., Cincinnati, O
Maher & Son Lightning Rod Co., Preston, Ia

Measures
Wilson Co., F. Cortez, Chicago, Ill

Metal—Perforated
Harrington & King Perforating Co., Chicago, Ill

Metal Polish
Nickle Plate Stove Polish Co., Chicago, Ill

Metal Shingles
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Nat'l Sheet Metal Roofing Co., Jersey City, N. J

Mica
Munsell & Co., Eugene Chicago, Ill

Miters
Whitacre, J. R. Mfg. Co., Rockford, Ill

Nails and Tacks—Copper
Hungerford, U. T., Brass & Copper Co., New York, N. Y
Hussey & Co., C. G., Pittsburg, Pa

Nuts
Columbus Bolt Works, Columbus, O

Paints and Paint Specialties
Buckeye Paint & Varn Co., Toledo, O
Connors, Wm., Paint Mfg. Co., Troy, N. Y
Dixon, Jos. Crucible Co., Jersey City, N.J

Pencils
Dixon, Jos. Crucible Co., Jersey City N.J

Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Pipe—Furnace
Excelsior Steel Furn. Co., Chicago, Ill
Michigan Safety Furnace Pipe Co., The Detroit, Mich

Plungers
Berger Bros. Co., Philadelphia Pa

Pumps
Star Bucket Pump Co., St. Louis, Mo

Punches
Armstrong-Blum Mfg. Co., Chicago, Ill
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works., Buffalo, N.Y
Robinson, Mfg. Co., J. M., Cincinnati, O

Putty—Stove
Connors Wm. Paint Mfg. Co., Troy, N.Y

Radiators—Stove Pipe
Rochester Radiator Co., Rochester, N.Y

Rasps
Disston, Henry & Sons., Philadelphia, Pa
Carver File Wks., Philadelphia, Pa

Razors
Droescher, S. R., New York, N. Y
Smith & Hemenway Co., New Y

Registers
Ferrosteel Co., Cleveland, O
Henry & Schetble Co., Cleveland, O
Independent Register & Mfg. Co., Cleveland, Ohio
Schwab & Sons Co., Milwaukee, Wis
Tuttle & Bailey Mfg. Co., New York, N.Y
U. S. Register Co., Battle Creek, Mich

Rivets
Columbus Bolt Works, Columbus, O
Hungerford, U.T., Brass & Copper Co., New York, N.Y

Roasters
Lalance & Grosjean Mfg. Co., Chicago, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Roofers' Supplies
Auld & Conger Co., Cleveland, O

Roofing—Iron and Steel
American Rolling Mills Co. Middleton, Ohio
American Sheet & Tin Plate Co. Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Delphos Mfg. Co. Delphos, Ohio
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City, N. J
Schoedinger, F. O., Columbus, O
Tanner & Co., Indianapolis, Ind
Wheeling Corrugating Co., Wheeling, W. Va

Roofing Cement
Auld & Conger Co., Cleveland, O
Connors Paint Co., The Wm., Troy, N.Y

Roof Paint
Dixon, Jos. Crucible Co., Jersey City, N.J

Rules
Lufkin Rule Co., Saginaw, Mich

Sash Balances
Pullman Mfg. Co., Rochester, N.Y

Sausage Stuffers
Enterprise Mfg. Co. of Pa. Philadelphia, Pa

Saw Sets and Saws
Disston, Henry & Sons, Philadelphia, Pa
Smith & Hemenway Co., New York, N.Y

Scales
Osgood Scale Co., Binghamton, N. Y

Schools—For Sheet Metal Pattern Drafting
Gray's School, New York, N. Y

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screen Door Checks
Pullman Mfg. Co., Rochester, N. Y

Screws
Columbus Bolt Works, Columbus, O

Screw Drivers
North Bros. Mfg. Co., Philadelphia, Pa

Seamless Tubing—Brass & Copper
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Shears
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson, Mfg Co., J. M., Cincinnati, O

Sheets—Black and Galvanized
American Rolling Mill Co., Middletown, O
American Sheet & Tin Plate Co. Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Griffiths Charcoal Iron Mills, Washington, Pa
Tanner & Co., Indianapolis, Ind
Wheeling Corrugat'g Co., Wheeling, W.Va

Sheets—Ingot Iron
American Rolling Mill Co. Middleton, Ohio

Sheets—Planished
American Sheet & Tin Plate Co., Pittsburgh, Pa
Follansbee Bros., Pittsburg, Pa
Griffiths Charcoal Iron Mills, Philadelphia, Pa
Tanner & Co. Indianapolis, Ind
Ward-Dickey Steel Co., Indiana Harbor, Ind

Sheets—Steel
American Sheet & Tin Plate Co., Pittsburgh, Pa
American Steel & Wire Co., Chicago, Ill
Follansbee Bros. Co. Pittsburgh, Pa
Griffiths Charcoal Iron Mills, Philadelphia, Pa
Tanner & Co., Indianapolis, Ind

Sheet Metal Ornaments
Berger Mfg. Co. Canton, O
Friedley-Voshardt Co., Chicago, Ill
Gerock Bros. Mfg. Co., St. Louis, Mo
Kelsey Metal Ceiling Co., Pittsburg, Pa
La Crosse Steel Roofing and Corrugating Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Schoedinger, F. O., Columbus, O

Shelf Boxes
Green & Co., A. H., New York, N. Y
Heller & Co., W. B. Montpelier O

Shelving
Heller & Co., W. B. Montpelier, O
Warren Mfg. Co., J. D., Chicago, Ill

Shovels
Avery Stamping Co., Cleveland, O

Siding
Milwaukee Corrugating Co., Milwaukee, Wis

Sifters
Stuber & Kuck, Peoria, Il.

Skylights
Berger Mfg. Co., Canton, O
Burt Mfg. Co., Akron, Ohio
Canton Art Metal Co., Canton, O
Eller Mfg. Co. Canton, O
Powers & Williams, Streator, Ill

Skylight Gearing
Weiss, H. & Co., New York, N.Y

Slate Roofing
Auld & Conger Co., Cleveland, O

Slating Nails
Hussey & Co., C. G., Pittsburg, Pa

Soldering Fluxes
Ruby Chemical Co., Johnston, Ohio

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa

Stampings—Sheet Metal
Avery Stamping Co., Cleveland, O

Statuary
Gerock Bros. Mfg. Co., St. Louis, Mo

Steel
American Steel & Wire Co., Chicago, Ill

Stoves and Ranges
Allen Mfg. Co., Nashville, Tenn
American Beauty Stove Co., Erie, Pa
Born Steel Range Co., Cleveland, O
Chicago Stove Works, Chicago, Ill
Economy Stove Co., Cleveland O
Floyd-Wells Co., The Chicago, Ill. & Royersford, Pa
Foster Stove Co., The, Ironton O
Fox Furnace Co., Elyria, Ohio
Germer Stove Co., Erie, Pa
Lindemann & Sons, J. P. Milwaukee, Wis
National Stove Co., Lorain, Ohio
Ohio Stove Co., Portsmouth, O
Paxton & Gallagher, Omaha, Neb
Quality Stove & Range Co., Belleville, Ill
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
White Stove Co., Thomas, Quincy, Ill

Stove Mats
Stuber & Kuck, Peoria, Ill

Stove Patterns
Cleveland Castings Pattern Co., Cleveland, O
Cope Pattern, Geo. W. Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N Y
Weller Pattern Co. Quincy, Ill

Stove Pipe
Hemp & Co., St. Louis, Mo

Stove Pipe Thimbles
Stuber & Kuck, Peoria, Ill

Stove Polish
Nickel Plate Stove Polish Co., Chicago, Ill

Stove Putty
Connors Paint Mfg. Co., Wm., St. Louis, Mo
Dixon, Jos. Crucible Co., J

Stove Repairs
American Stove Repair Works, St. Paul, Minn
Brauer, A. G., Supply Co., St. Louis, Mo
Manufacturers Stove Repair Co., Chicago, Ill
U. S. Stove Repair Co., Minneapolis, Minn

Store Fixtures
Heller & Co., W. B. Montpelier, O

Sugar Kettles
Sperry, D. R. Co., Batavia, Ill

Supplies—Foundry
Obermayer Co., S., Cincinnati, O

Supplies—Stove Dealers'
Brauer, A. G., Supply Co., St. Louis, Mo

Tacks
Hungerford, U. T., Brass & Copper Wks New York, N. Y

Tapes
Lufkin Rule Co., Saginaw, Mich

Technologist
Hooper, C. N. Dubuque, Iowa

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinners' Furnaces
Clayton & Lambert Mfg. Co., Detroit, Mich
Turner Brass Works, Sycamore, Ill

Tinners' Tools
Armstrong, Blum Mfg. Co., Chicago, Ill
Auld & Conger Co., Cleveland, O
Berger Bros. Co., Philadelphia, Pa
Bertsch & Co., Cambridge, Mass
Lufkin Rule Co., Saginaw, Mich
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson Mfg. Co., J. M., Cincinnati, O
Smith & Hemenway Co., New York N.Y
Weiss & Co., H., New York, N. Y

Tinplate
American Sheet & Tin Plate Co., Pittsburg, Pa
Eller Mfg. Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Merchant & Evans Co., Philadelphia, Pa
Wheeling Corrugating Co., Wheeling, W. Va

Tinware Trimmings
Berger Bros. Co., Philadelphia, Pa

Tools, Etc.
North Bros Mfg. Co., Philadelphia, Pa
Perfection Wrench Co., Port Chester, N. Y
Simmons Hardware Co., St. Louis, Mo

Tools—See Carpenters' Tools

Tools—Linemen's
Smith & Hemenway, New York, N.Y

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Inc., Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Brass and Copper
Hungerford, U. T., Brass & Copper Co. New York, N. Y

Tubing—Heavy Tin
Dieckmann, Ferdinand, Cincinnati, O

Ventilators
Berger Mfg. Co., Canton, Ohio
Burt Mfg. Co., Akron, O
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago Ill
Globe Ventilator Co., Troy, N.Y
Independent Register & Mfg. Co., Cleveland, Ohio
Iwan Mfg. Co., Streator Ill
Merchant & Evans Co., Philadelphia, Pa
Powers & Williams, Streator Ill
Pullman Mfg. Co., Rochester, N. Y
Uno Ventilator Co., Lynn, Mass

Wagons
Sycamore Wagon Wks., Sycamore, Ill

Washers
Columbus Bolt Works., Columbus, O

Washing Machines
White Lily Mfg. Co., Davenport, Ia

Wire
American Steel & Wire Co., Chicago Ill

Wire Goods
Denning Wire & Fence Co., Cedar Rapids Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Wire Stretchers
Smith & Co., C. F. De Kalb, Ill

Wrenches
Perfection Wrench Co., Port Chester, N. Y

Wants and Sales

For Paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

BUSINESS CHANCES.

PATENTS HUBERT E. PECK 623 F. Street, N. W. Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications."

For Sale—Hardware stock invoicing from $6,000 to $8,000. Situated in finest of Iowa towns. Best hardware building and location in town. Present sales $15,000. Address L-46, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 18-3t

Tinshop for Sale—Three lots 50 by 150, good tinshop, barn, warehouse and full set of tinner's tools. Fine location and two railroads in town. Good farming country. Address W. H. Besel, Oran, Missouri. 17-3t

For Sale—Tinshop, full set of tools, and some stock for $300 cash. Only shop in railroad town of 1,800 inhabitants. Write at once. Address J. A. Phillips, Thayer, Missouri. 16-3t

For Sale—General hardware business of about $8,000 in good Nebraska town. Growing business and well settled country. Have sickness in family and want to go West. Address L-42, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 17-3t

For Sale—Stock of hardware. The best opportunity to go into the hardware business in the United States. In a good town in the best county in Kansas. Cash only will buy it. Address W. W. Wheeler, Harlan, Iowa. 17-3t

For Sale—In A1 condition, 1 set Howe counter scales, 200-pound capacity, at $7.00; 1 three-foot cutlery show case, 15 inches high, at $4; 1 pair Baltzley's stove trucks at $2.50; 12 sets standard stove trucks at 90 cents each. Address Ebert Hardware Co., Truman, Minnesota. 17-3t

For Sale—Well established hardware, tinshop and implement business at invoice price. Will invoice about $5,000. Must sell on account of poor health. Business in good condition and clean up-to-date stock. A splendid opportunity. Address L-40, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 16-3t

For Sale—Well established hardware, stove and tin business with good paying shop. Located in one of the nicest and best cities of 10,000 inhabitants in the state of Ohio. Best of schools, etc. Poor health reason for selling. Address L-38, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 16-3t

Will Exchange—A complete Landing Ronning account system, nearly new and in fine condition, cost $21, for a second-hand Dupligraph, a Quick Easy Copying Press or a Duplicator. If you have any of these write to A. F. Ramharter, Clear Lake, South Dakota. 16-3t

For Sale—75c on the dollar will buy one of the finest stocks of General Hardware with Warren Fixtures, including Stoves, Paints, Oils, Glass, etc., in Northern Illinois. This stock will invoice about $10,000 and is a fine proposition for a Hardware Man and will stand close investigation. This city has a population of ten thousand inhabitants and is one of the most beautiful cities in the state for its size. This is a splendid business opportunity. No trade. Write for particulars. Address L-22, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. ufn

TINNER'S TOOLS.

For Sale Cheap—One tin folder, one round-faced hammer, one pair roofing tools, one wiring machine, one small turning machine. The above are in good condition. Address C. A. Peck Hardware Co., Berlin, Wisconsin. 18-3t

Wanted—An 8-foot cornice brake in first-class condition. State best cash price, condition and pattern. Address P. O. Box 423, Bloomington, Illinois. 17-3t

HELP WANTED.

Wanted, Furnace Salesman—We want a hustler who can estimate, sell and superintend installing hot air furnaces. Knowledge of hardware, paint and roofing would be desirable. Steady job for right man. Must be a salesman, not necessarily a tinner. Address Box 423, Bloomington, Illinois. 18-3t

Wanted—Good tinner at once. Good wages to right man. Can come at once. New shop and good place to work. Address Kerr & Avery, Lake Villa, Illinois. 18-3t

Wanted—By large stove concern, a man to take charge of pattern shop employing about 25 men; must be a man of experience and able to make his own drawings and designs, also run shop economically. Address L-48, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 18-3t

Wanted—Good reliable tinner and furnace man at once. Address G. Sayers' Hardware, 92 Third Ave. W., Cedar Rapids, Iowa. 17-3t

Wanted—Two good tinners at once. Apply Hoernel Hardware Co., Racine, Wisconsin. 17-3t

Wanted—Two first-class all around tin and sheet iron workers. Must be steady and reliable. Steady work; wages $3.50 per day (10 hours). Address L-41, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 16-3t

Wanted—First-class, energetic stove salesman on commission basis to sell the greatest specialty line of Steel Ranges made. Our line has more patented features of merit than all other lines combined. Only competent men who are business getters need apply. Applications treated strictly confidential. Some good territory in West and Middle West still open. Address Allen Mfg. Co., Nashville, Tennessee. 16-3t

Wanted—All around tinner and furnace man. Mostly indoor work. Steady, sober man. Steady work the year around for the right man. Wages $2.75 or $3.00 per day of ten hours. Address Matern's Stove Store, 713 Water St., Sandusky, Ohio. 18-6t

Wanted—Two first-class tinners for in and outside work, capable of doing any kind of sheet metal work. We have the best shop in the country and the best job for two good men. Wages $3 per day of eight hours. Address Scott Mfg. Co., Robinson, Illinois. 16-3t

SITUATIONS WANTED.

Situation Wanted—By first-class tinner and practical furnace man (warm air). Sober, reliable and steady. Am married man and would like steady work or would buy part interest in shop. State wages and conditions in first letter. Address L-45, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 18-3t

Position Wanted—By first-class tinner with 18 years' experience. Can estimate work and take full charge of shop if so desired. Steady and competent. Use no intoxicants. Address L-47, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 18-3t

Situation Wanted—By young man with 1½ years' experience in plumbing and tinning trade. A position as second man preferred. Address Box 36, Glenburn, North Dakota. 16-3t

Position Wanted—Retail hardware merchant who has made a specialty of stove salesmanship with decided success wishes a position on the road with first-class line of stoves and ranges. Address L-29, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 16-3t

SPECIAL NOTICES.

FOR SALE

Up-to-date hardware store on Northwest side, Chicago. Established 15 years. No nearby competition; good business street with car line. Invoices $4000 to $5000; sales about $1000 per month; cheap rent. Part cash and security or will exchange for vacant or improved Chicago property Will bear closest investigation. Owner wishes to retire. Address A. J. Mergenes, 824 Armitage Av., Chicago. 18-2t

WANTED

Two competent stove and range salesmen. None but steady, sober, and reliable men need apply. Address B-35, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 17-5t

Position Wanted.

Traveling Salesman with experience and ability wants position with hardware manufacturer. At present covering eastern territory. Best of references. Address "B-30," care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 16-7t

For Sale or Trade

In Oregon Real Estate

Oldest Hardware and Machinery stand. No stock. Brick building; best location. Only one competitor. In Southern Minnesota town. Address R. Reierson, 182 Morrison Portland, Oregon. 10-9t

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Visiting stove trade to handle household specialty as a side line. Extensively advertised in largest magazines. Easy seller; immense sales; big profits. In writing state line you are selling and territory you cover. Address C. E Swartzbaugh, 1336 West Bancroft St., Toledo, Ohio. 14-5t

STOVE SALESMAN

Wanted—A first-class stove salesman to travel Wisconsin, Indiana, and Michigan. None but good man with established trade need apply. Address B-31, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 18-4t

HARDWARE STOCK WANTED

in exchange for a good improved farm, well located. Give amount of stock price of buildings and full particulars in first letter. Address B-34, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 18-2t

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A reliable experienced Stove and Range salesman to represent us in the State of Michigan. Our new CLERMONT Base Burner has more special features and has the largest circulating flue of any Base Burner made. THE GEM CITY STOVE CO., Dayton, Ohio. 18-1t

You cannot make accurate Liquid measures; you lack men and standards.

Wilson does make accurate Liquid measures; a specialty since 1869.

Serve your trade. Do not fool them. When a man wants a measure, sell it to him—a cup will not serve even if it looks like a measure.

Wilson's TRUO measures are the only accurate measures. You can build and hold trade by filling the occasional wants. Ask for section 5. F. Cortez-Wilson Co., Sheet Metal Works, 243 Lake Street, Chicago.

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The following letter was received and in answer to the eighth order for 48-in. Glass Top Burt Ventilators:

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are doing the work of the old style Monitor Roofs so much better at smaller expense in construction and installation. Burt Ventilators have the greatest ventilating power and capacity of any. They are storm and dust proof, open or closed, provided with Patent Sliding Sleeve Damper which does not shut out the light from Glass Top, and which can be adjusted to any degree of opening. Made with Metal or Glass Tops as desired. Can be furnished with fusible link connection to close damper automatically in case of fire.

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FOR SALE

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Salesmen Wanted

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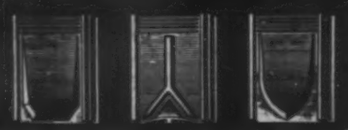
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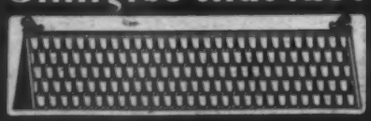
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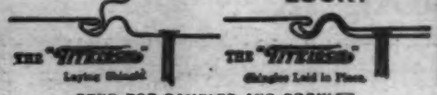

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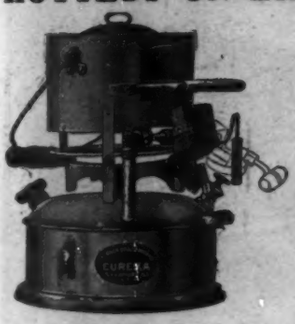

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You will be surprised to find out how cheap you can buy this up-to-date machine

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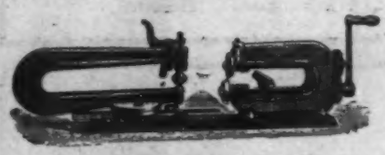
PHILADELHPIA.

TOOLS FOR SHEET METALS



Waugh's Circle Shears.

INCLUDING

Tinners' and Roofers' Tools, Shears, Punches, Presses and Dies, Can-Making Machinery

MADE BY

Niagara Machine & Tool Works
BUFFALO, N. Y.

MARVEL

Patent applied for

PORTABLE PUNCH No. 20

Made entirely of STEEL

Punches ¾ in. hole in ¾ in. and equivalent

Let us send you one on trial.

Write for circular and price of this and other Marvel Punches and Shears.

ARMSTRONG-BLUM MFG. CO.,
106 N. Francisco Ave., Chicago, Ill.

C. G. Hussey & Company

PITTSBURGH, PENNA.

Manufacturers of

Soft Copper,	Copper Nails and Tacks,	Cold Rolled Copper,
Copper Gaskets,	Tinned Copper,	Special Shapes Sheared or Stamped,
Copper Bottoms,	Polished Copper,	Slat ng Nails,
Soldering Irons		

PROMPT SHIPMENT FROM STOCK.

Some people pay out thousands of dollars a year for advertising. Do you think they are imprudent or reckless?

THE ELLER TRADE-MARK
is a little thing to look for, but a big thing to find; it appears on all genuine
ART METAL CEILINGS
Tin and Terne Plate — Steel Roofing
Eaves Trough, Conductor Pipe — Brick and Stone Siding
Elbows and Shoes — Cornice and Skylight
ELLER MFG. CO. : : CANTON, OHIO

Lock Joint
Metal Ceilings

Handsome Panels Effects
Special Designs Submitted on Request
Artistic Combinations
Perfect Joints
Absolutely Dust-Proof
Send for Catalog "D"
S. Keighley Metal Ceiling & Mfg. Co.
Pittsburgh, Pa.
Baltimore New York Washington Boston

SKYLIGHTS
for any purpose. Our new and complete catalogue is now ready for distribution.
THE CANTON ART METAL CO.
CANTON, OHIO

Standard Metal Shingles

The Canton Ventilator

Made with Metal and Glass Tops and with and without Automatic closing device.
THE CANTON MFG. CO.
CANTON, OHIO
Makers of
Cornice, Skylights, Metal Ceilings, Eaves Trough, Conductor Pipe, Etc.

The Powers AUTOMATIC Chimney Top
Iron mountings only or complete with cover and vane.
Double the sale and triple the efficiency of smoke stacks.
Powers & Williams
Streator, Ill.
Ask us for prices on skylight glass and metallic skylights.

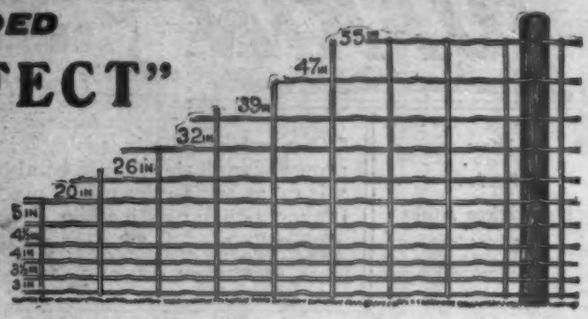
Uno Revolving Ventilators
A sure cure for smoky chimneys, the best for ventilation.
4" to 30"
Send for Catalogue
Uno Ventilator Co.
P. O. Box 209 LYNN, MASS.

STANDARD HORSE NAIL CO.
NEW BRIGHTON, PA., U.S.A.
MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

Eliminate All Your Fence Troubles by Using the

ELECTRICALLY WELDED

"PITTSBURGH PERFECT" Fences



The strongest on the market and the most satisfactory. You can't know what a really good fence is until you have tried the

"PITTSBURGH PERFECT."

WRITE FOR OUR CATALOG TO-DAY.

Pittsburgh Steel Co., Pittsburgh, Pa.

Iwans' Volcano Revolving Chimney Top

Sizes 6 to 12 inches. Sold by jobbers of Hardware and Tinners' Supplies.

Notice one of its **Strong Features.** The upward sloping opening in back of hood creates a constant upward draft, no matter how depressing the atmosphere.

You need it for some of your customers' chimneys.

Send postal for catalogue.

IWAN BROTHERS
Mfrs. of Hardware Specialties
STREATOR, ILL.

Shelf Boxes,
Hardware Shelving,
Counters,
Screw, Bolt and
Seed Cases,
Store Ladders,
Glass Cutting Boards,
Immediate Shipments,
Send for Booklet.

W. B. HELLER & CO.,
MONTPELIER,
OHIO

Drink Pure Water

The **No. 50 Star Pump** shown here will positively purify the water in any well or cistern in a short time.

This purifying feature alone makes it the only pump fit to put in any well where the water is used for household purposes, for it will surely save its cost in the Doctor's bill many times over.

As it is made of No. 24 gauge galvanized iron it is a very substantial and handsome outfit, and will last for years.

Our line of purifying pumps is very complete. So is our line of Galvanized Chain Pump Curbs and Tubing.

Ask your jobber for Star Pumps.

STAR BUCKET PUMP CO.
ST. LOUIS, MO.

INTERCHANGEABLE
LOCK-CORNER SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
97-101 Warren St., NEW YORK.

- SHELVING -
WARREN SYSTEM
SELF PAYING
HARDWARE STORE EQUIPMENT
IN INTERCHANGEABLE SECTIONS
& SCREW, BOLT & GUN CASES.
J. D. WARREN MFG. CO. CHICAGO U.S.A.

DEALERS! Here is a sample of our Farm Advertising

Handle ours and you will be on the right side. The farmer knows about them. We have a branch at Kansas City and can ship on short notice.

"THE DENNING" CORN CRIBS AND GRAIN BINS

Will store your whole crop at a nominal cost.

"THE DENNING" FENCE

Will take care of your poultry, hogs and stock.

"THE DENNING" LAWN FENCE

Will ornament your premises.

Ask your dealer for "The Denning." Take no substitute.

THE DENNING WIRE & FENCE CO. **CEDAR RAPIDS, IOWA**

Empire Door Holder

Improved

50 per cent greater pressure on the door than any other. Easy to apply. Easy to operate.

CALDWELL MFG. COMPANY
41 Jones St., Rochester, N. Y.

Where Successful business men have advertised is pretty safe to advertise.

LUFKIN Measuring Tapes

are made in every conceivable variety, to suit every purse and purpose, but all of the same superior quality.

¶ Our extensive advertising creates a demand, that every progressive dealer should be able to satisfy.

¶ It takes but a minute and a postal to ask for our catalog—it's more than worth while.

Please Mention The American Artisan

THE LUFKIN RULE CO. Saginaw, Mich., U. S. A.

New York London, Eng. Windsor, Ont.

DISSTON SAWS

Run Easiest
Cut Fastest
Last Longest

To the practical Saw User this tells the full story of HIGHEST PERFECTION in Material, Temper, Design and Workmanship attained for the DISSTON BRAND OF SAWS.

HENRY DISSTON & SONS, Inc.

Keystone Saw, Tool, Steel and File Works

PHILADELPHIA, PA.

A NEW PATTERN STANDARD LEVEL—Two Level Glasses, One Plumb Glass

Side glasses may be reversed at any time; all easily adjustable; all glasses in plain view from both sides; brass trimmings on both sides.

No. 31—Solid Cherry.
No. 32—Three-piece Cherry.
No. 33—Solid Mahogany

THE BAKER-McMILLEN COMPANY, Akron, Ohio

STRAP & T HINGES
Pressed Steel Shelf Brackets

BUTT HINGES
Barn Door Hangers and Track

Our Planished Steel **STRAP and T HINGES** are now all made on Automatic Machinery—Every one is as true as a Die. Our **BUTTS** are unequalled in Workmanship and Finish, All our Goods Guaranteed—**BEST IN THE WORLD.** (And they cost no more.)

THE GRIFFIN MFG. CO., 1500 Cherry St., Erie, Pa.

CUT THIS OUT

To the Publishers

The American Artisan and Hardware Record

355 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

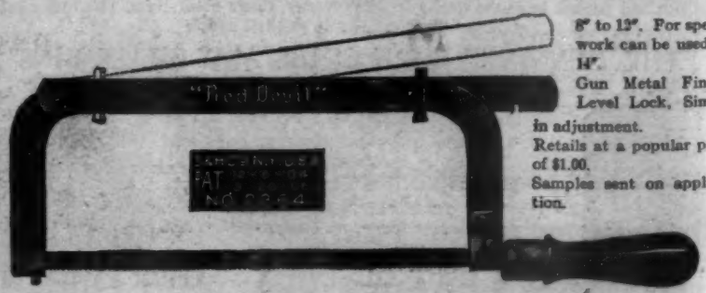
NAME _____

ADDRESS _____

TOWN _____

STATE _____

Genuine "RED DEVIL" Hack Saw Frame



8" to 12". For special work can be used on 14".

Gun Metal Finish, Level Lock, Simple in adjustment.

Retails at a popular price of $1.00.

Samples sent on application.

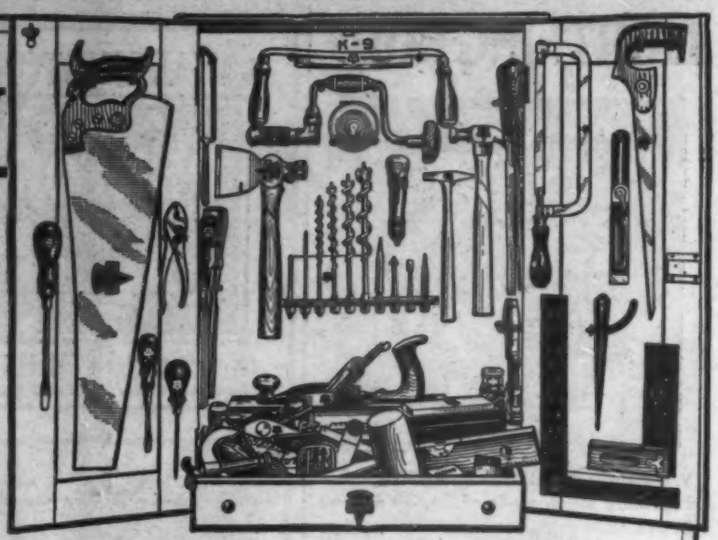
Order through your jobber or direct from us. Insist upon the Genuine "RED DEVIL"

SMITH & HEMENWAY CO., 108-110 Duane Street, New York City

Order Now

KEEN KUTTER

TOOL CABINETS



FOR THE **HOME** AND **SHOP**

E. C. SIMMONS KEEN KUTTER Trade Mark U.S.A.

KEEN KUTTER THE KIND THE PEOPLE WANT AND CALL FOR **KEEN KUTTER**

Tool Cabinet Booklets, with Your Firm Name printed on, FURNISHED FREE
ALSO COMPLETE NEWSPAPER ADVERTISEMENTS

See Our Salesmen or Write Us for Prices. Address DIVISION 5

SIMMONS HARDWARE CO., INCORPORATED **ST. LOUIS, MO.**

"Yankee Tools"

Are Without Equal in Quality or Efficiency in Practical Use

New Styles—Have You Seen Them?

MAGAZINE RATCHET SCREW DRIVER, NO. 65

RATCHET DRIVER with SCREW HOLDER NOS. 110-111-115

RATCHET "SCREW EYE" DRIVER, NOS. 80 and 81

ASK YOUR JOBBER ABOUT THEM

Send for "Yankee" Tool Catalog.

North Bros. Mfg. Co., Philadelphia

Blick No. 3 The Best Box

For Rural Free Delivery

Be Just With Customers

Sell them Blick No. 3 boxes. They are big ones, 6½ x 8½ x 19 inches. Made of heavy galvanized steel. Painted green, the new government color. Same shape and color as city boxes. Have Positive Locking Flag Signal, Automatic Latch, Watertight Quality. Every box tested, every box right, every box warranted. They will get the business. You better get them. Order now.

$5.88 per Doz.

Blick - Williams Co.
Indianapolis, Ind.

KNOWN MERIT SWEEPS ALL BEFORE IT. IF YOUR GOODS HAVE MERIT YOU SHOULD MAKE THEM KNOWN

LIGHTNING RODS

We manufacture Pure Copper Wire Cable Lightning Rods, made of 28, 30 and 49 Wires, with complete outfit of trimmings.

E. A. FOY & CO., Cincinnati, Ohio

Trade Supplied at Lowest Rates.
Send for Catalogue "B."

HONES ARE HONES

But "APART" Hones are the Thing

For Sale by all Jobbers

S. R. DROESCHER
79 Warren St., NEW YORK, N. Y.

It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

Address

DANIEL STERN
358 Dearborn St., - CHICAGO

THE HARRINGTON AND KING-PERFORATING CO.

PERFORATED METALS
OF EVERY DESCRIPTION AND FOR ALL PURPOSES
FOR SCREENS OF ALL KINDS

No. 212 NORTH UNION STREET, CHICAGO, ILL.
New York Office, 114 Liberty Street.

You Are Invited to Take Notice of the

White Lily Motor Washer

¶ It will be a valuable addition to your line. ¶ This new Water Motor Machine is of standard White Lily Quality throughout. ¶ The motor is small and compact, but powerful. ¶ It is of the simplest construction, there being no springs in the cylinder, and only one in the piston. ¶ Wearing parts are all brass—Tubs of selected Louisiana cypress—Stave legs—Mahogany finish.

Operates on Very Low Pressure

WHITE LILY MFG. CO.
1500 Rockingham Road, Davenport, Iowa

We have the best Pure Copper Cable

Lightning Rods

and fixtures on the market, and to prove what we say is right, we are willing to send any firm a sample outfit and they can look it over, and if it is not the best they have ever seen, and not satisfactory in every way, we want the whole shipment returned at our expense and it costs them nothing. We manufacture all our own goods and know just what they are, and we want every hardware dealer to write to us for prices and territory. We give a $500.00 guarantee and also one of our improved static machines.

WRITE TODAY TO

Maher & Son Lightning Rod Co., Preston, Iowa

"ELECTRA" PURE COPPER LIGHTNING RODS AND FIXTURES

NOTHING BETTER PRICES RIGHT WRITE US

To convince you we mean what we say, let us ship you an outfit upon approval. If you don't like it you may return it to us at our expense.

ELECTRA LIGHTNING ROD CO., 220-240 Market Street CRESCO, IOWA

We Have a Hardware Delivery Wagon That You Can Depend Upon

Body 20 inches from the ground, full width; regular height wheels, and yet will turn short.

EASY TO LOAD AND UNLOAD

Durability guaranteed. Complete catalogue on request. Mention this paper and address in full.

SYCAMORE WAGON WORKS, 109 EDWARDS ST., Sycamore, Ill.

Our New No. 5
Self Basting Roaster

Made in Four Enamels

GRAY
Agate-Nickel-Steel
El-An-Ge

WHITE-LINED
Robin-Egg Blue
Turquoise

Also in Black Steel Lacquered

OPEN VIEW

One of the best and most serviceable articles we manufacture.

CLOSED VIEW

LALANCE & GROSJEAN MFG. CO.

NEW YORK CHICAGO BOSTON

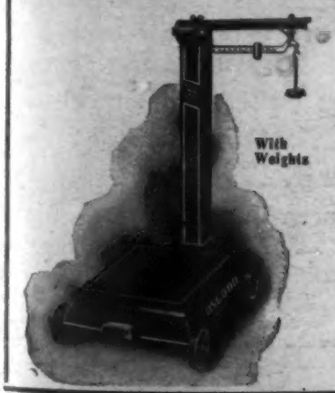
YANKEE [All Steel] DAMPERS and CLIPS

FOR SMOKE PIPE AND FURNACE PIPE

THE S. M. HOWES COMPANY, 40-46 Union St., BOSTON

OSGOOD SCALE CO.

Binghamton, N. Y.


With Weights

U. S. Standard

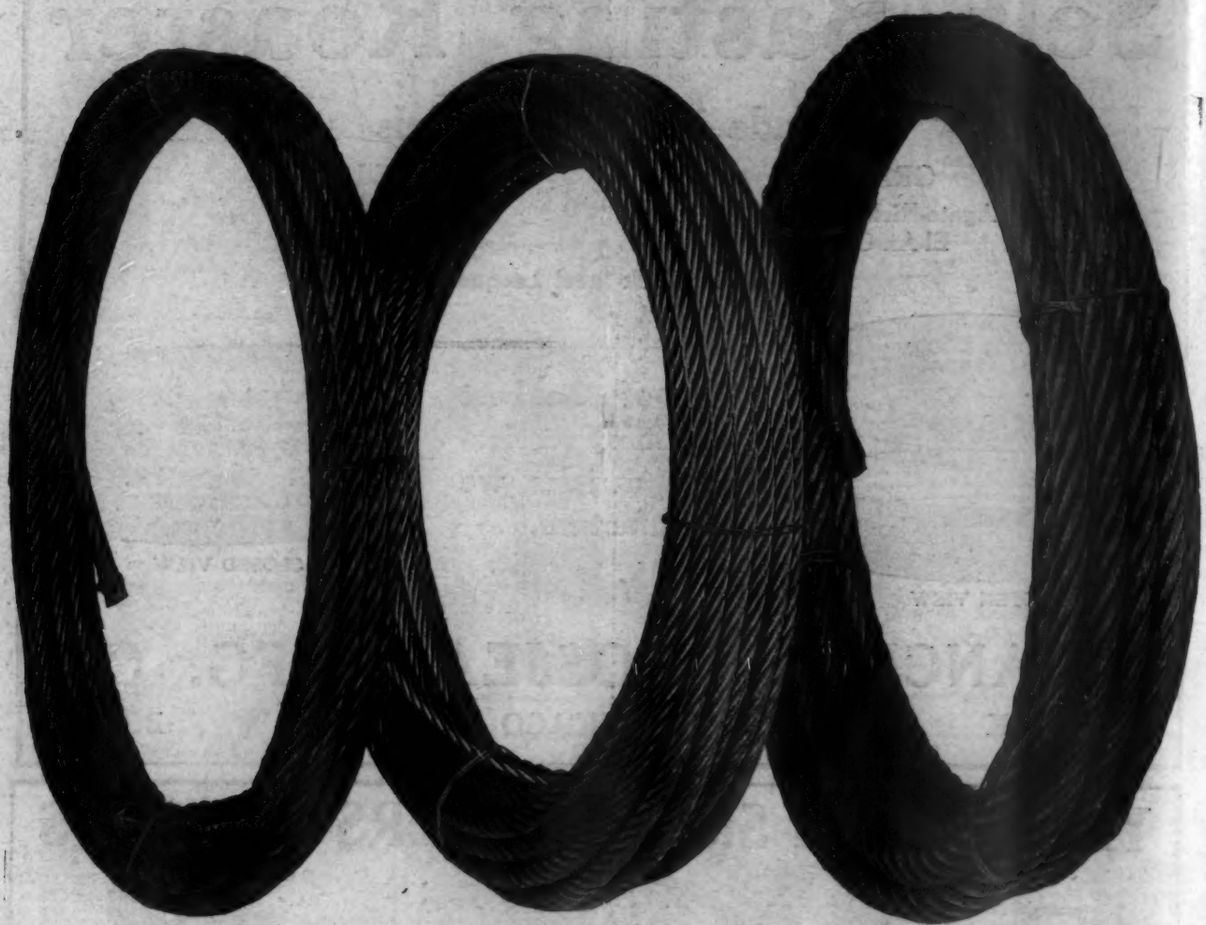
ALL KINDS

For Sale by all First Class Jobbers.

Without Weights

Sold direct or through our distributers.

Large stocks carried at convenient points all over the country, ready for quick delivery in either short or long lengths, on reels or in coils.



72 Feet
¾-in. Crucible Cast Steel
Hoisting Rope

202 Feet
¾-in. Monitor Dredge
Rope, 6 x 19

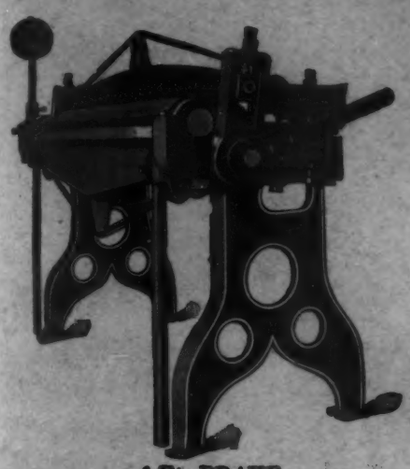
78 Feet
1-in. Plow Steel
Hoisting

American Dredge Rope

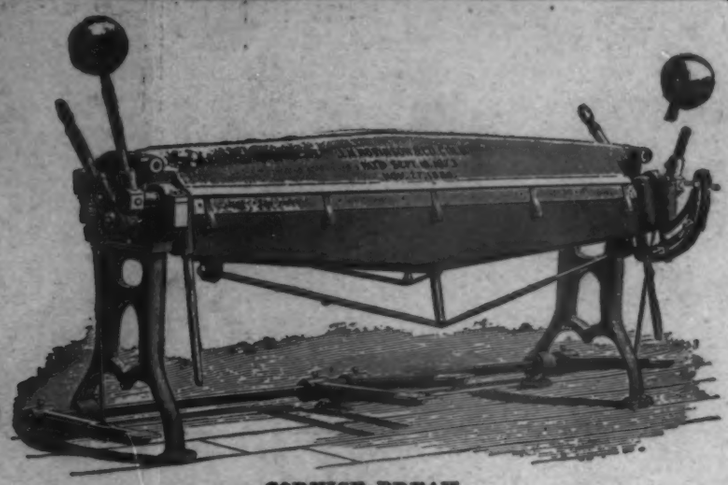
IN the great work of reclamation of the submerged lands of the Mississippi Valley there is no more active mechanical factor than our dredge rope. We make this rope with full knowledge gained from years of experience in the hard usage to which it is subjected, than which perhaps no other service can show an equal. There is not the same risk of life that goes with the operation of an elevator or a mine hoist, but there is greater wear, necessitating a very close study of the requisite quality of material and also experience in manufacture, to produce a flexible, reliable and durable dredge rope.

We offer our rope to dredgemen with assurance of the highest *uniform* quality and efficiency, as proven by the many years that it has now been successfully identified with this service.

American Steel & Wire Co. Chicago New York Worcester Denver San Francisco



4 Ft. BRAKE
Capacity 12 Gauge.



CORNICE BREAK
Capacity, 20 Gauge and Lighter.

THE J. M. ROBINSON MFG. CO.

Manufacturers of Sheet Metal Working Machinery

3282 to 3288 Spring Grove Avenue CINCINNATI, OHIO

GOT THE PATTERNS HE WANTED

To THE AMERICAN ARTISAN:

I wish to take this opportunity to thank you and my brother "tinks" for patterns for the one-piece chimney cap that I have been looking for. I have received cuts and patterns from all over the country through your valuable paper for the chimney cap, and as it would take me quite a while to write letters of thanks to all those who have submitted patterns through THE AMERICAN ARTISAN, I wish to convey my thanks to them and to you through your paper.

815 State Street, Bowling Green, Ky., Sept. 1, 1908. JOHN F. CARTWRIGHT.

DRIVE THESE TANDEM!

"Enterprise" Meat Choppers and

"Enterprise" Sausage Stuffers and Lard Presses

Every user of an **"Enterprise" Sausage Stuffer and Lard Press** needs an **"Enterprise" Meat Chopper.** Sell them together. Push them together. Drive them "tandem."

Every dealer, and almost every buyer, knows the superiority of genuine "Enterprise" Choppers.

Lest you forget, we remind you of these points about the **"Enterprise" Sausage Stuffer and Lard Press:**

Accurately-bored cylinder. Lips on the inner tin cylinder to make easy its handling when heated. No hot iron cylinder to handle when pressing lard. A patent latch which prevents breaking of plates. Patent corrugated spout prevents air entering the casing, thus assuring preservation of sausage.

Write for catalogue describing, illustrating and listing these and other "Enterprise" specialties. Get our advertising aids for dealers.

The Enterprise Mfg. Co. of Pa.

Philadelphia, U. S. A.

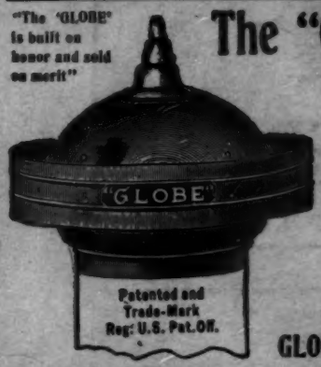
21 Murray Street, New York 438 Market Street, San Francisco

THE IMPROVED ONE-PIECE MITER

This miter is made absolutely correct, true to shape, size and bead, and the easiest connecting-slip joint. Will save your time and temper. In case your supply house cannot furnish them, send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

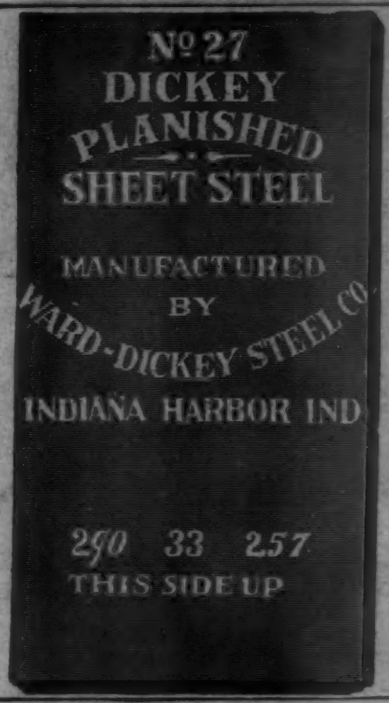
"The 'GLOBE' is built on honor and sold on merit"



The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes.

ABSOLUTELY STORM PROOF
For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character
SMOKY CHIMNEYS CURED
"GLOBE VENTILATED RIDGING"
Send for Pamphlet
MANUFACTURED BY
GLOBE VENTILATOR CO., Troy, N. Y.



GENUINE
HAMMER PLANISHED SHEETS

"Planished Sheets"

means Hammer Finished sheets.

Do not accept Roll finished substitutes when ordering "PLANISHED."

Insist upon the genuine articles in sheets, pipe, elbows and like goods.

A HANDSOME PROFIT

can be made on every item of our justly celebrated

Enameled Ware, Tin Ware, Japanned Ware and Galvanized Ware.

This Water Pail is only one of our line of many salable goods consisting in all of

OVER 500 FAST SELLING ITEMS
Star Enameling & Stamping Co., PITTSBURGH, PA.

We have installed Machines for decorating Cans and would be pleased to submit estimates upon request.
STUBER & KUCK, Peoria, Ill.

This Space for Sale.
Inquire of Daniel Stern,
355 Dearborn St., Chicago

THE BUSY ROOFER

is the man who uses

SCOTT'S EXTRA COATED
HAMMERED OPEN HEARTH
ROOFING TIN

Made by

FOLLANSBEE BROTHERS CO.
PITTSBURGH

No Building Too Good for It.

Made according to the

Old Welsh Method

Skylights and Cornices
Fireproof Metal Windows
(Glazed with Wire Glass)
Metal Ceilings and Side Walls
EASTLAKE METAL SHINGLES
Gutters and Conductors, Roofings of all Kinds.
Send for Catalogue and Prices.
The W. J. Burton Co.
Detroit, Mich.

THE "CENTENNIAL"
RAIN - WATER CUT - OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut-off made to fit Corrugated and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Manufactured only by
The Sullivan-Geiger Co.
19 & 21 E. South Street, Indianapolis, Ind.